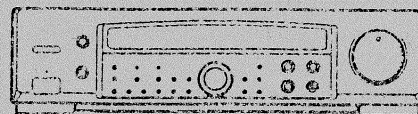


Service Manual

SERV. 7063
 **PIONEER**
The Art of Entertainment



ORDER NO.
ARP2637

STEREO TUNER CONTROL AMPLIFIER

CX-J510

CX-J410

CX-J310

CX-J510, CX-J410 AND CX-J310 HAVE THE FOLLOWING :

Type	Model			Power Requirement	Remarks
	CX-J510	CX-J410	CX-J310		
WE	○	○	○	AC 220-240V	
WB	○	○	○		
WEWZI	○	○	○		

- This manual is applicable to WE and WB types.
- For the following : CX-J510/WB ; CX-J410/WB ; CX-J310/WE AND WB, refer to page 65.
- For the following : CX-J510/WEWZI ; CX-J410/WEWZI ; CX-J310/WEWZI, refer to the service manual ARP2639 for CX-J510, CX-J410 and CX-J310.
- This product is a system(s) component.
 - This product does not function properly when independent ; to avoid malfunctions, be sure to connect it to the prescribed system component(s), otherwise damage may result.
 - This product's instructions are contained within the operating instructions manual of the related system component(s).
 - The manual is packed with those component(s).
 - This product's accessories etc. are packed with its related component(s).

CONTENTS

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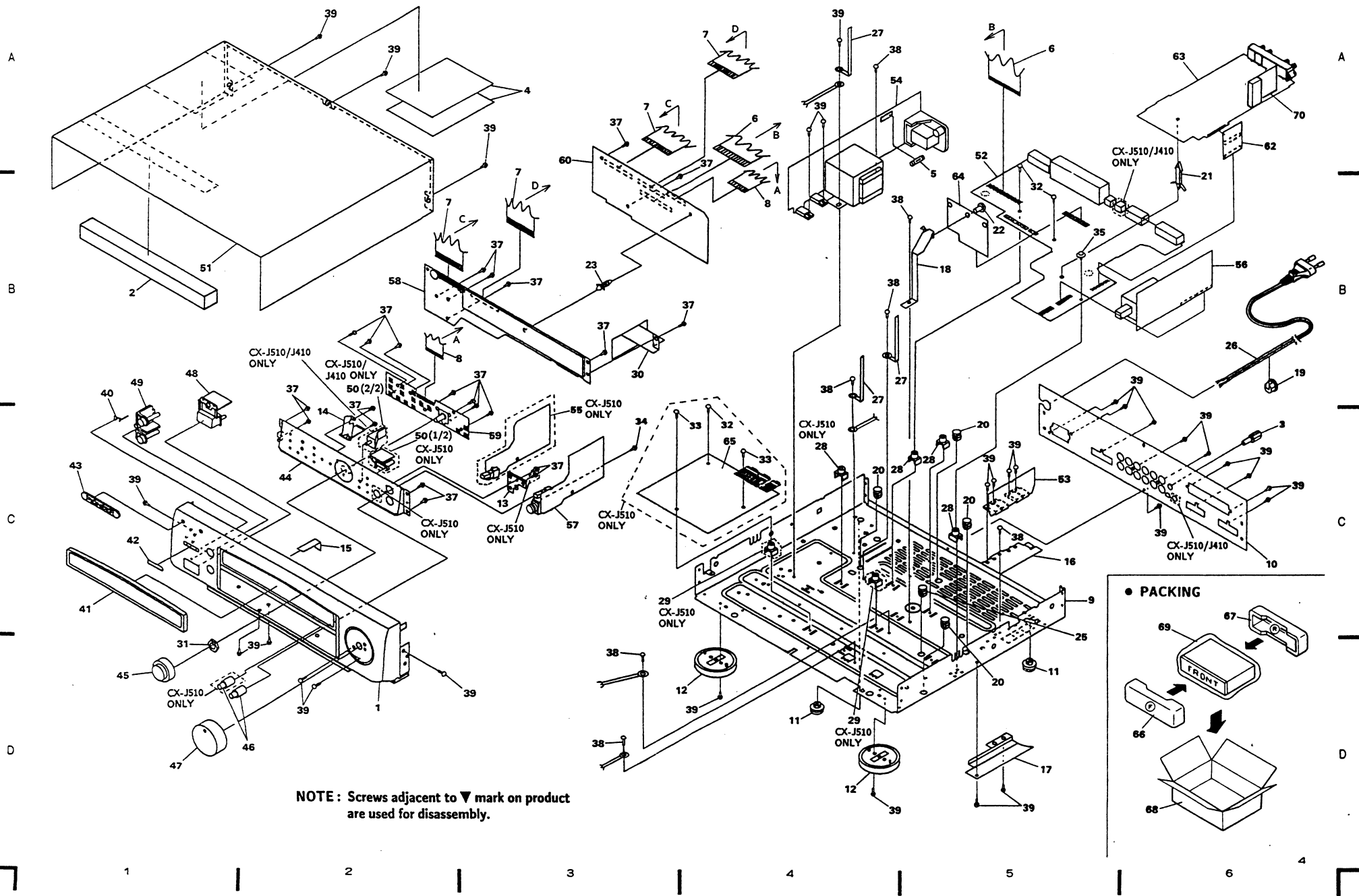
FO DEC. 1992 Printed in Japan

1. EXPLODED VIEWS, PACKING AND PARTS LIST

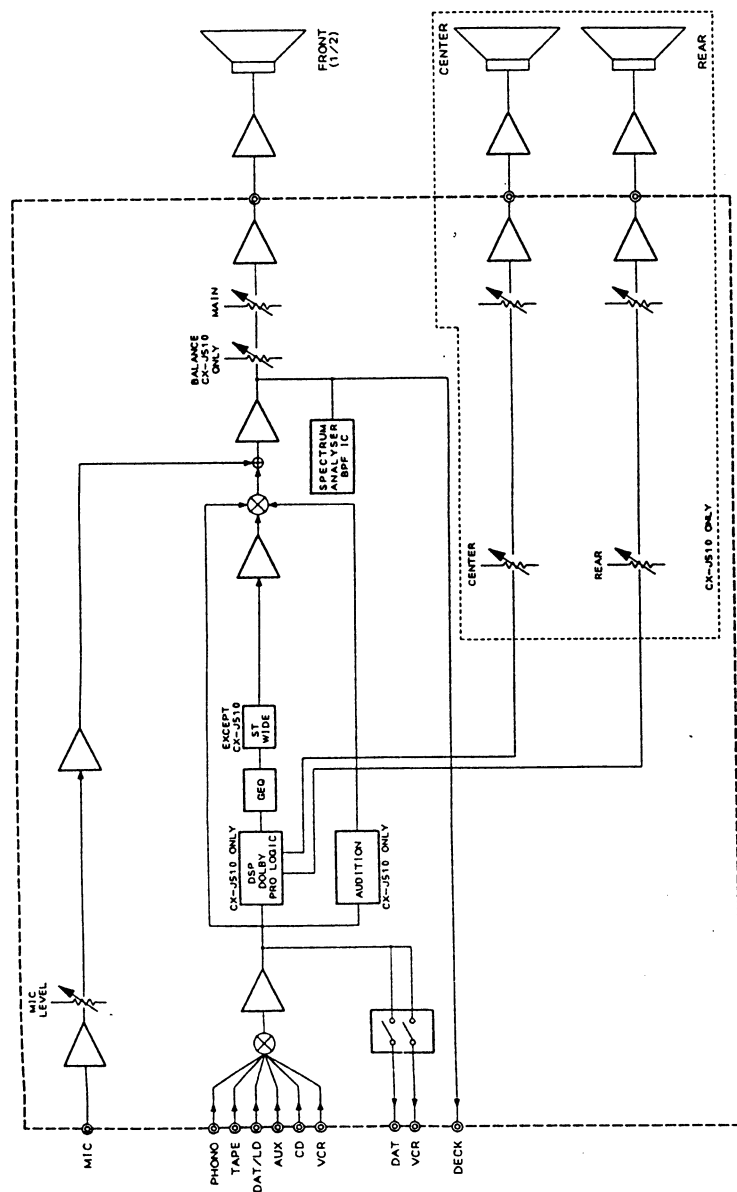
NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "☉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
	1	FRONT PANEL(PLS)(CX-J410)	AMB2051		44	SUB PANEL ASSY(CX-J410)	AMR2476
	1	FRONT PANEL(PLS)(CX-J510)	AMB2052		44	SUB PANEL ASSY(CX-J510)	AMR2474
NSP	2	CUSHION	AEC1488		45	JOG KNOB(PLS)	AAB1313
NSP	3	TERMINAL SCREW	AKE-031		46	MIC KNOB(PLSS)	AAB1314
	4	BARRIER(PS)	AEC1487		47	VOL KNOB(PLS)	AAB1322
Δ	5	FUSE (FU2,T2A/250V)	AEK-511		48	POWER BUTTON(PLS)	AAD2406
NSP	6	J1 FLEXIBLE CABLE	ADD1112		49	FUNCTION BUTTON(PLS)	AAD2407
NSP	7	J3,J4 FLEXIBLE CABLE	ADD1113		50	AUDITION BUTTON(PLS)	AAD2342
NSP	8	J2 FLEXIBLE CABLE	ADD1114		51	BONNET(MTL)	ANE1382
NSP	9	CHASSIS(MTL)	ANA1193	☉	52	MAIN ASSY(CX-J410)	AWZ4431
NSP	10	REAR PANEL(MTL)(CX-J410)	ANC1967	☉	52	MAIN ASSY(CX-J510)	AWZ4429
NSP	10	REAR PANEL(MTL)(CX-J510)	ANC1963	☉	53	REGULATOR ASSY	AWZ4438
	11	LEG ASSY(S)	AMR1937	☉	54	SUB TRANS ASSY	AWZ4443
	12	FOOT ASSY(ABS)	RXA1448	NSP	55	BALANCE ASSY (CX-J510 ONLY)	AWZ4446
NSP	13	MIC HOLDER(MTL)	ANG1728				
NSP	14	PLATE (MTL)	ANG1729	☉	56	VOLUME ASSY(CX-J510)	AWZ4447
NSP	15	PCB HOLDER(MTL)	ANG1730	☉	56	VOLUME ASSY(CX-J410)	AWZ4449
NSP	16	COVER (MTL)	ANG1731	☉	57	MIC ASSY(CX-J510)	AWZ4452
NSP	17	SCREW COVER(MTL)	ANG1792	☉	57	MIC ASSY(CX-J410)	AWZ4453
NSP	18	PCB HOLDER(MTL)	ANG1795	☉	58	FL ASSY	AWZ4746
	19	STRAIN RELIEF	AEC-882	NSP	59	KEY ASSY(CX-J410)	AWZ4456
NSP	20	PCB SUPPORT	AEC1010	NSP	59	KEY ASSY(CX-J510)	AWZ4747
NSP	21	PCB SPACER	AEC1100	☉	60	U.COM ASSY(CX-J510)	AWZ4460
	22	NYLON RIVET	AEC1160	☉	60	U.COM ASSY(CX-J410)	AWZ4462
NSP	23	PCB SUPPORT	AEC1215	NSP	62	CONNECT ASSY	AWZ4547
	24	.....			63	TUNER ASSY	AWE1261
NSP	25	PCB SUPPORT	AEC1461		64	EQ ASSY	AWF1009
Δ	26	AC POWER CORD	ADG1049		65	DSP ASSY(CX-J510 ONLY)	AWX1058
	27	BINDER	AEP-215		66	FRONT PAD	AHA1579
NSP	28	PCB MOLD	AMR1525		67	REAR PAD	AHA1580
NSP	29	PCB MOLD	AMR2115		68	PACKING CASE(PAP)(CX-J510)	AHD2484
NSP	30	SHIELD COVER	ANK1219		68	PACKING CASE(PAP)(CX-J410)	AHD2482
	31	NUT	NK90FUC		69	PACKING SHEET	AHG1017
	32	SCREW	ABA1018		70	F.E. MODULE ASSY	AXQ1002
	33	SCREW(CX-J510 ONLY)	ABA1024				
	34	SCREW (STEEL)	ABA1095				
	35	SCREW	ABA1100				
	36	.....					
	37	SCREW	BPZ26P080FMC				
	38	SCREW	BBZ30P060FZK				
	39	SCREW	BBZ30P080FZK				
	40	LENS(POWER IND)	AAK2343				
	41	DISPLAY PANEL(PLS)	AAK2434				
	42	REMOTE CONTROL FILTER(PLS)	AAK2376				
NSP	43	NAME PLATE(PLASTIC)	AAM1047				



2. BLOCK DIAGRAM



3. SCHEMATIC AND PCB CONNECTION DIAGRAMS

Note:

(Type 3)

1. When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".

2. Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.

3. RESISTORS:

Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.

Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.

Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.

4. CAPACITORS:

Unit: p:pF or μF unless otherwise noted.

Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.

Rated voltage: 50V except for electrolytic capacitors.

5. COILS:

Unit: m:mH or μH unless otherwise noted.

6. VOLTAGE AND CURRENT:

mV : Signal voltage at FM 1kHz, 100% MOD.

V : DC voltage (V) at no input signal unless otherwise noted.

Value in () is DC voltage at rated power.

mA or - mA : DC current at no input signal unless otherwise noted.

7. OTHERS:

- : Signal route.
- ⊙ : Adjusting point.
- ▼ (Red) : Measurement point.

• The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

8. SWITCHES (Underline indicates switch position):

FLASSY

S1101 : FUNCTION

S1102 : POWER STANDBY/ON

S1103 : EFFECT ON/OFF

KEY ASSY

S1111 : SET

S1112 : WAKE UP

S1113 : REC

S1114 : CLOCK ADJ

S1115 : LOCAL/DX

S1116 : MEMORY SCAN

S1117 : STATION MEMORY

S1118 : TUNING +

S1119 : TUNING -

S1120 : FREQ/ST

S1121 : BAND

S1132 : GEQ ON/OFF

S1133 : SFC MODE

S1134 : GEQ FREQ ←

S1135 : GEQ FREQ →

S1136 : DOLBY MODE

S1137 : CENTER MODE

S1138 : AUDITION

S1141 : SOUND JOG.

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

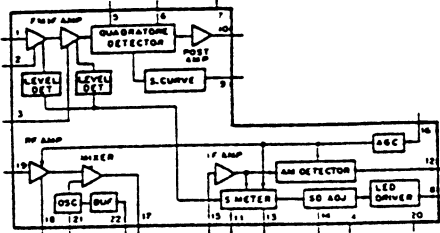
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
0504 E O		Transistor
Q215		Radiator type transistor
D203		Diode
R237		Resistor
C513		Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capacitor terminal marked with ⊖ (double circles) shows negative terminal.
4. The diode terminal marked with ⊙ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

IC902 LA1265S

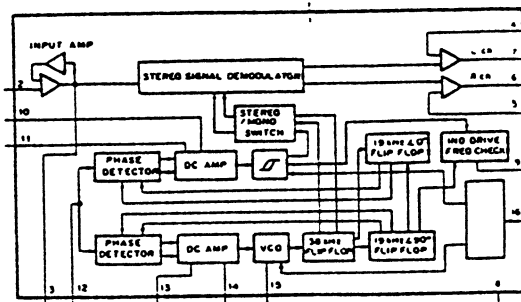


IC902 LA1265S

Pin No.	Voltage	Pin No.	Voltage	Pin No.	Voltage
1	2.3	10	2.8	17	0
2	2.3	11	1.5	18	12.0(AM)
3	2.3	12	1.5	19	0
4	0	13	1.4(MAX)	20	2.0(AM)
5	12.0	14	1.4(MAX)	21	0
6	12.0	15	0(AM)	22	2.0(AM)
7	12.0	16	2.3		
8	0(T)		1.1(AM)		
	5.1(D)		1.4		
9	3.8				1.5(AM)

Note: (T) TUNE IND. ON
(D) TUNE IND. OFF

IC903 AN7470P

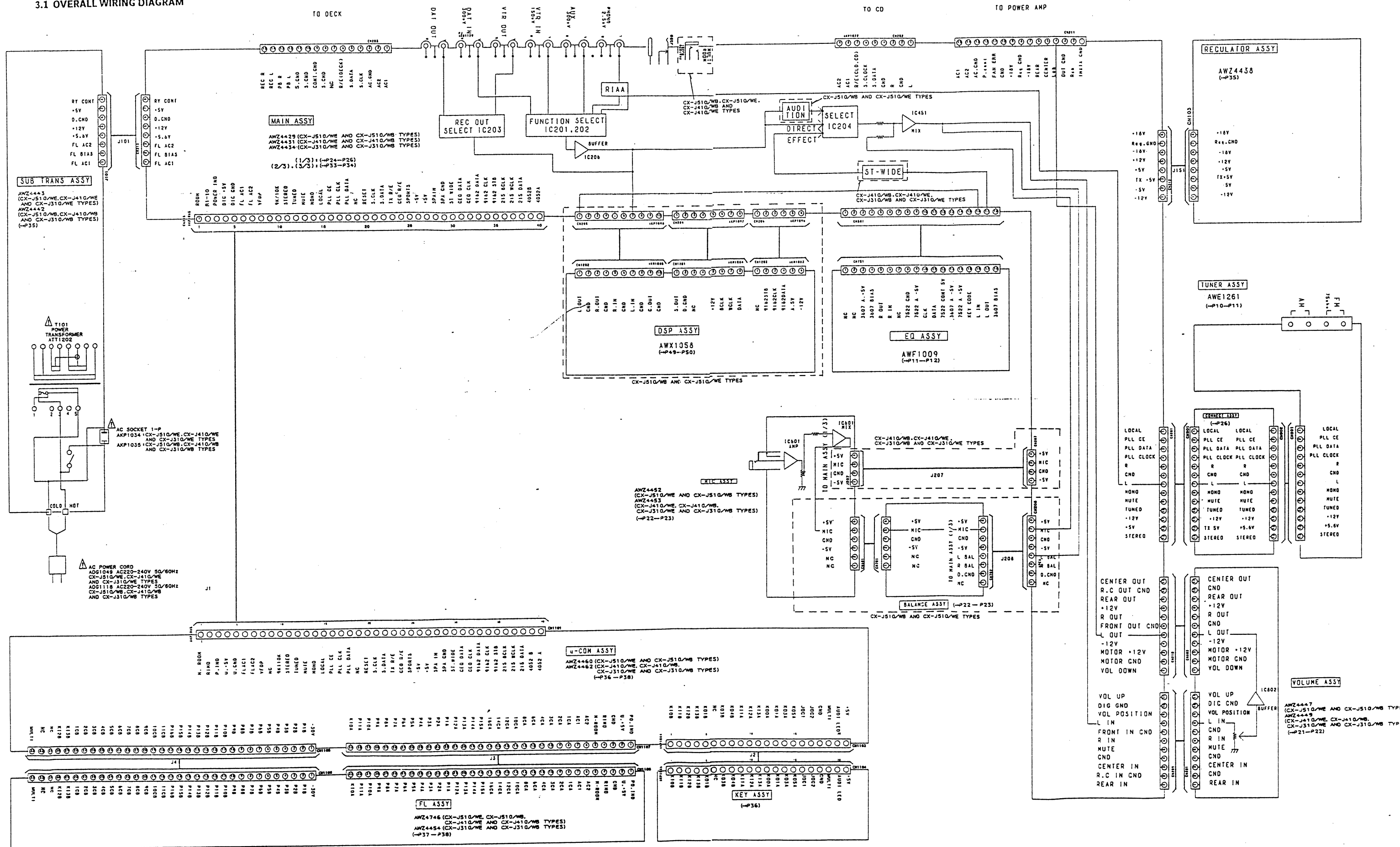


IC903 AN7470P

Pin No.	Voltage	Pin No.	Voltage	Pin No.	Voltage
1	11.2	9	4.9	15	3.2
2	2.6		0.6	16	0
3	6.1		(STEREO)		11.4
4	8.9	10	2.6		(AM)
5	8.9	11	2.6		4.0
6	3.9	12	2.6		(MONO)
7	3.9	13	2.6		
8	0	14	2.6		

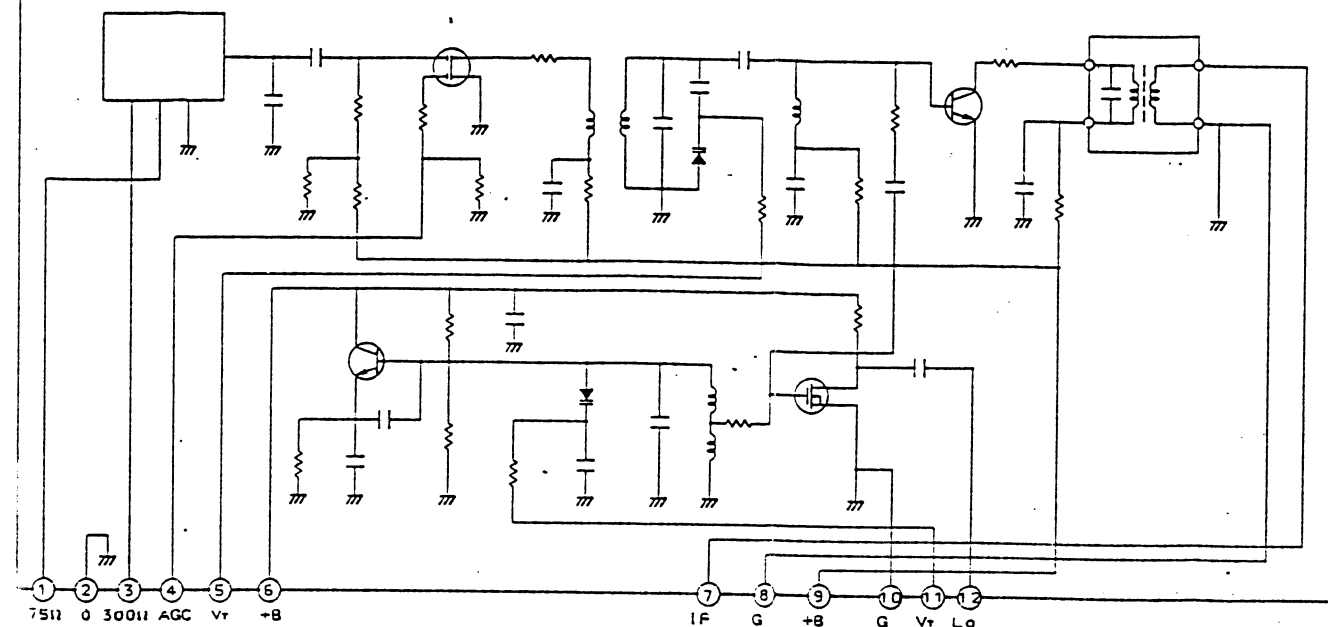
OUTPUT LEVEL
650 mV

3.1 OVERALL WIRING DIAGRAM

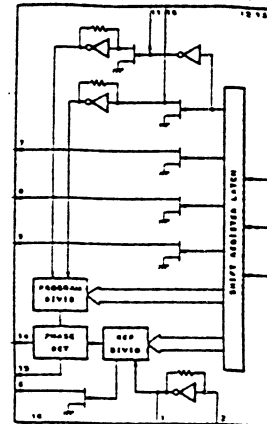


2.2 TUNER ASSY, EQ ASSY

2 SERIAL FE MODULE ASSY



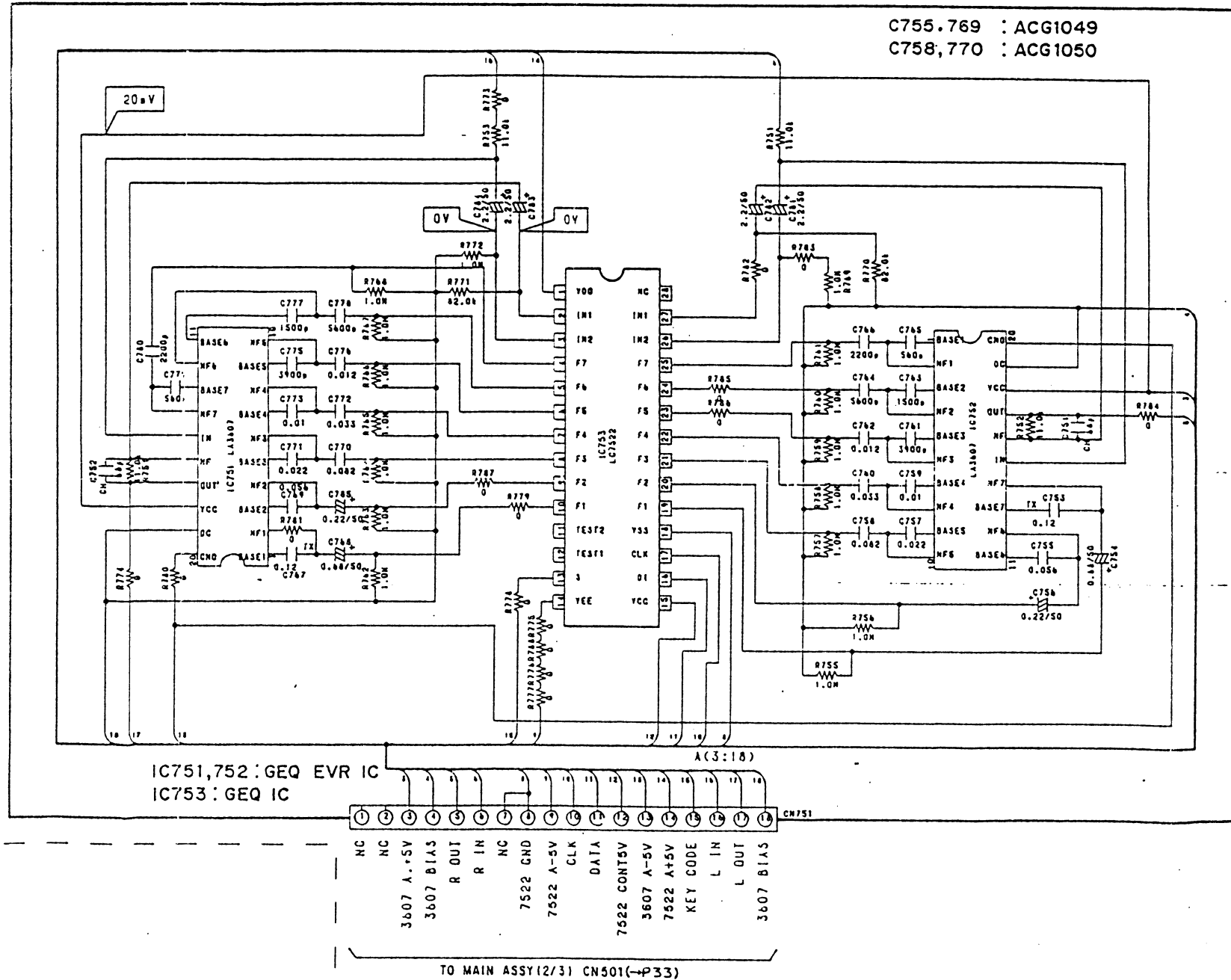
IC901 LM7001



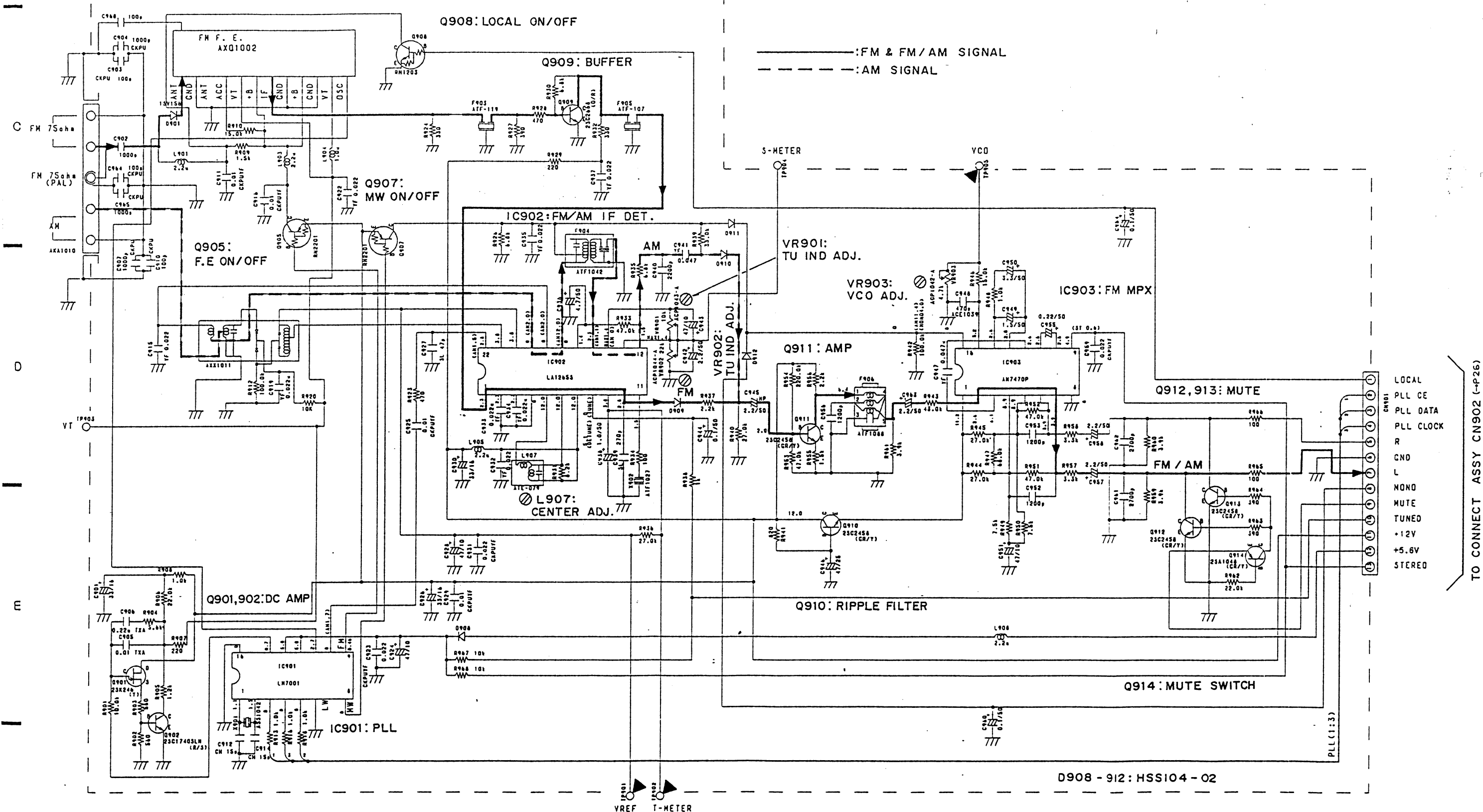
IC901 LM7001

Pin No.	Voltage	Pin No.	Voltage
1	1.1	9	0.46
2	1.5	10	0 (AM: 1.7)
3	0	11	2.7
4	0	12	5.0
5	0	13	5.0
6		14	0.7
7		15	
8	0	16	0

EQ ASSY (AWF1009)



TUNER ASSY (AWEI261)



D908 - 912: HSS104 - 02

VREF T-METER

—: FM & FM/AM SIGNAL
- - - : AM SIGNAL

S-METER

VCO

VR901: TU IND ADJ.

VR903: VCO ADJ.

Q912, 913: MUTE

FM / AM

Q910: RIPPLE FILTER

Q914: MUTE SWITCH

Q901, 902: DC AMP

L907: CENTER ADJ.

IC902: FM/AM IF DET.

Q905: F.E. ON/OFF

Q907: MW ON/OFF

Q908: LOCAL ON/OFF

Q909: BUFFER

FM F. E. AXQ1002

C904 1000

C903 CKPU 1000

C902 1000

C901 1000

C900 1000

C899 1000

C898 1000

C897 1000

C896 1000

C895 1000

C894 1000

C893 1000

C892 1000

C891 1000

C890 1000

C889 1000

C888 1000

C887 1000

C886 1000

C885 1000

C884 1000

C883 1000

C882 1000

C881 1000

C880 1000

C879 1000

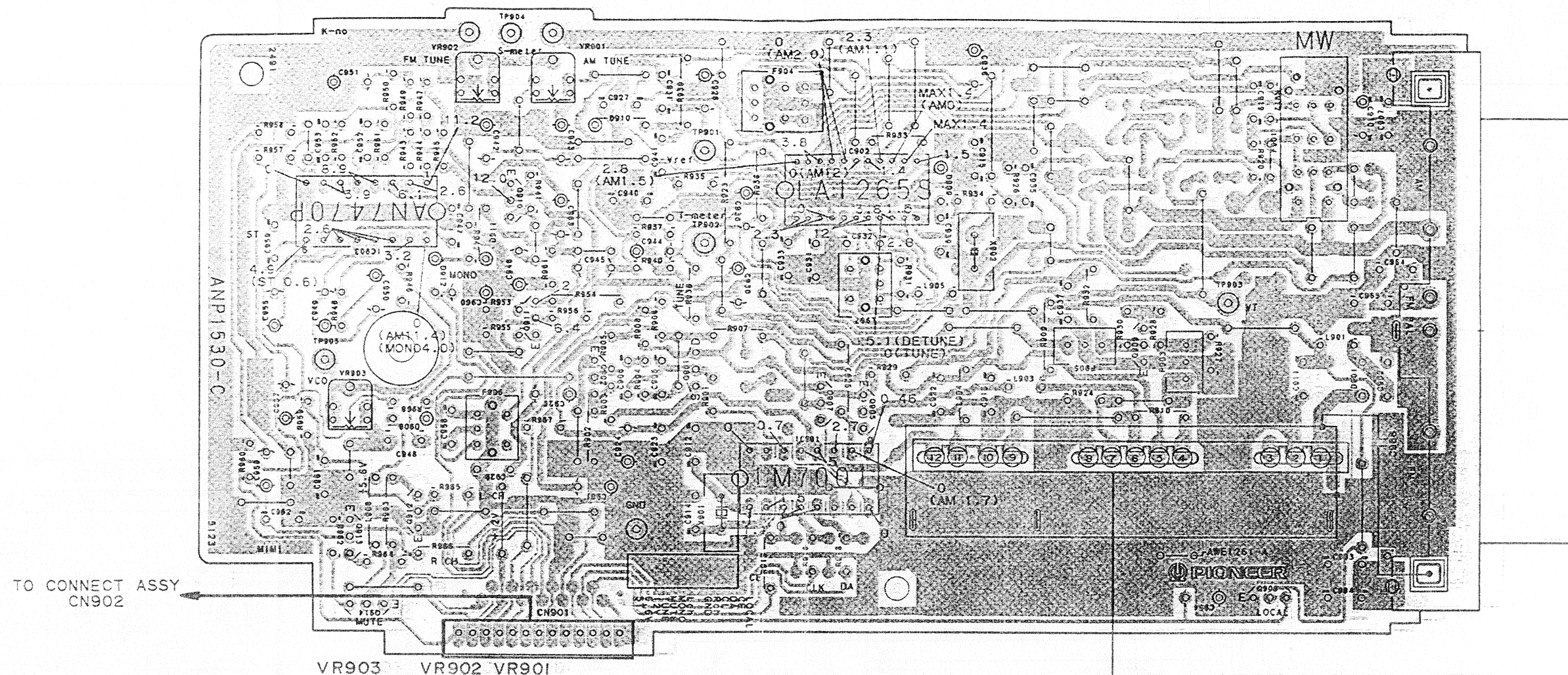
C878 1000

C877 1000

C876 1000

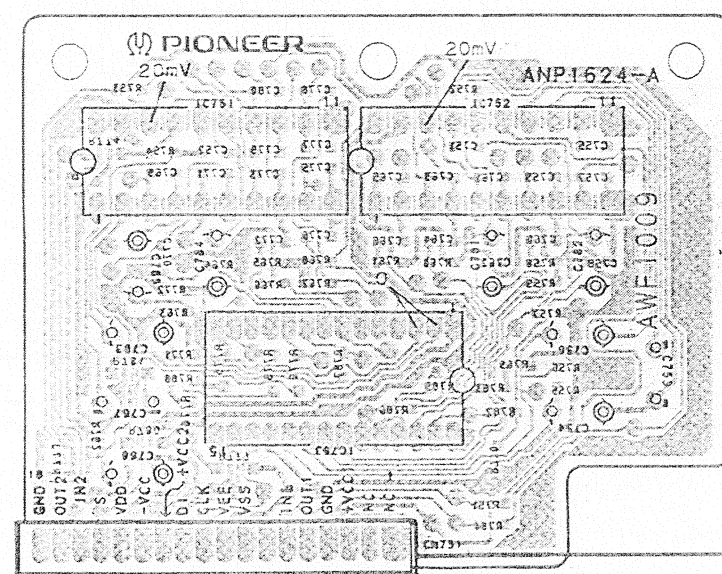
C875 1000

TUNER ASSY (AWE1261)

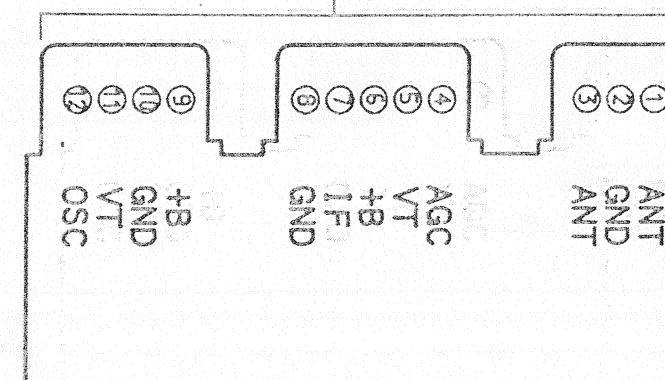


VR903 VR902 VR901
 IC903 Q912 Q910 Q902 Q901 Q907 Q905
 Q913 Q914 Q911 IC901 IC902
 Q909 Q908

EQ ASSY (AWF1009)

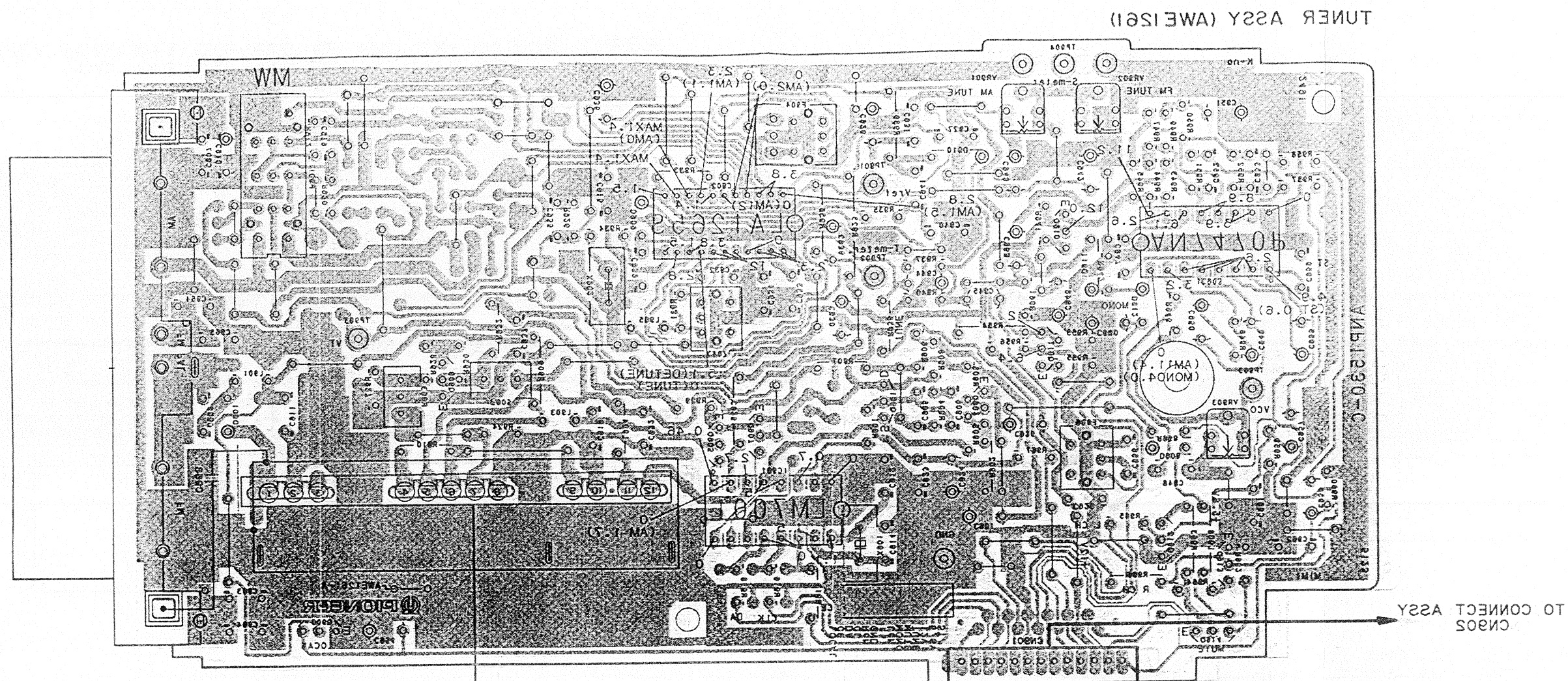


IC751 IC753 IC752

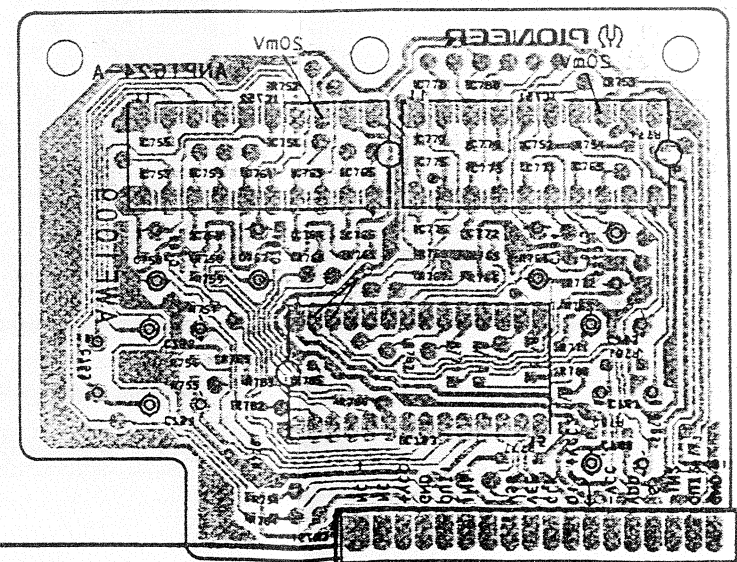


FE MODULE ASSEMBLY
 (AXQ1002)

This P.C.B. connection diagram is viewed from the foil side.

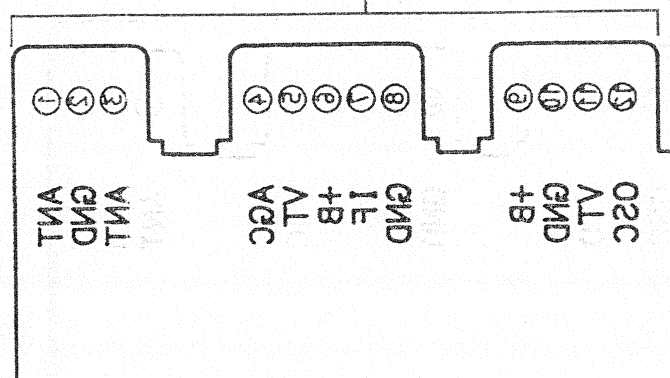


EQ ASSY (AWF1009)



Y22A MIAM OT
102501

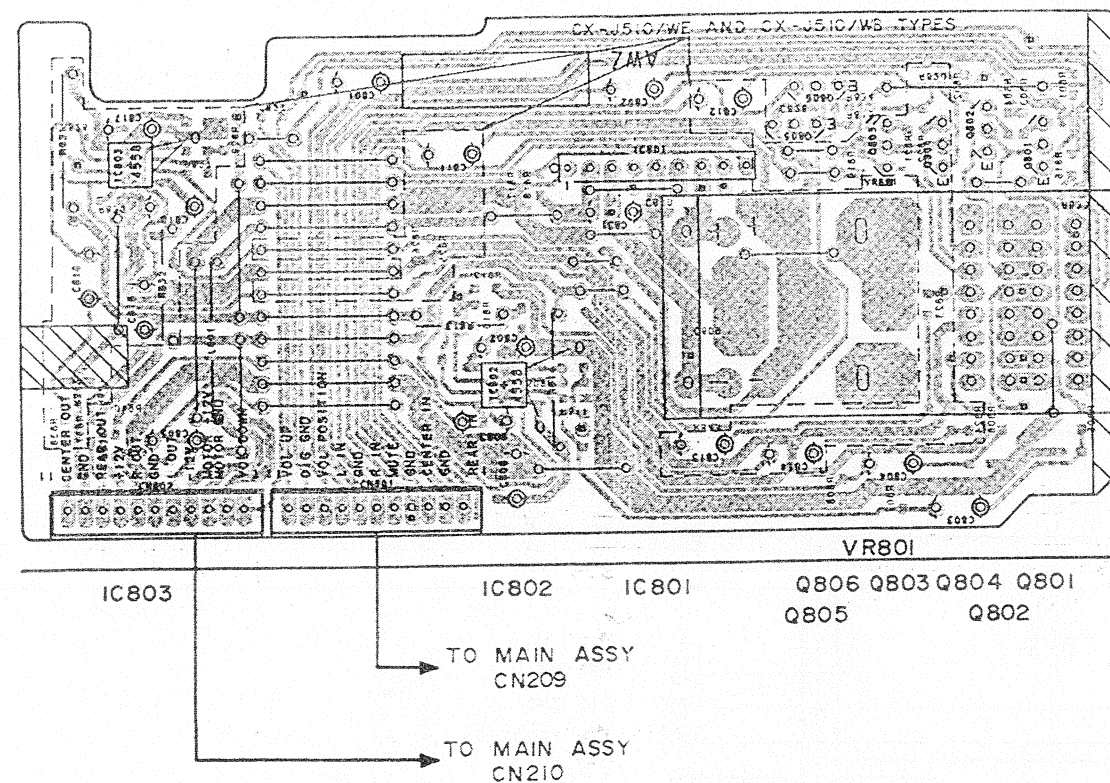
IC 751 IC 752 IC 755



FE MODULE ASSEMBLY
(AXQ100S)

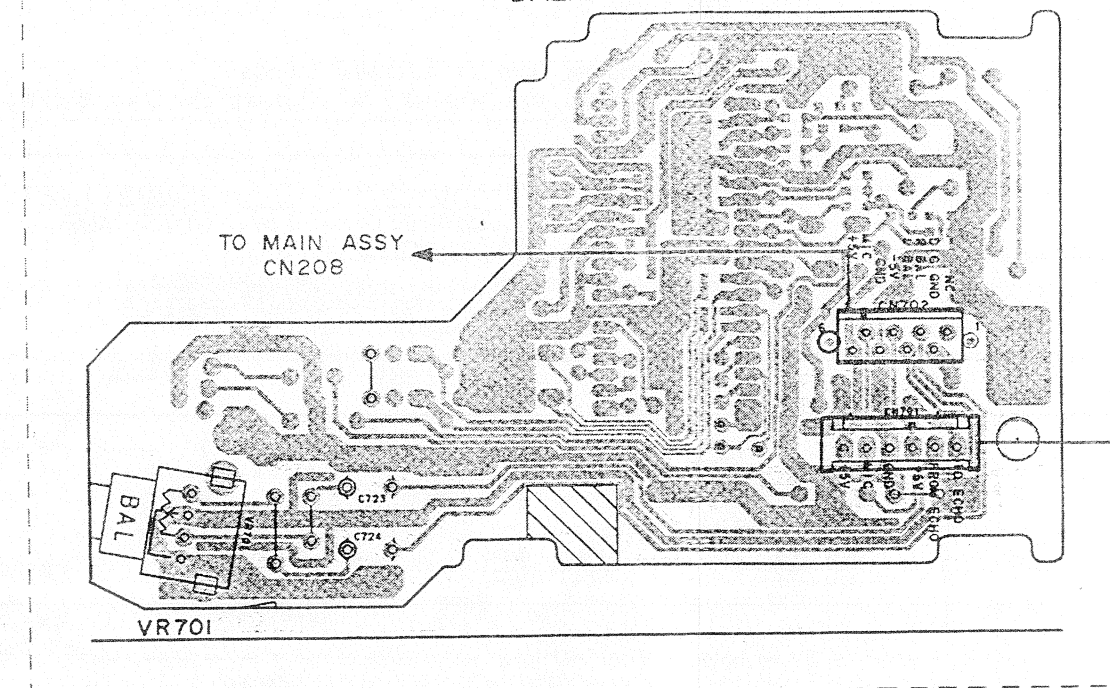
3.3 VOLUME ASSY, MIC ASSY, BALANCE ASSY

A VOLUME ASSY (AWZ4447: CX-J510/WE AND CX-J510/WB TYPES)
(AWZ4449: CX-J410/WE, CX-J410/WB,
CX-J310/WE AND CX-J310/WB TYPES)

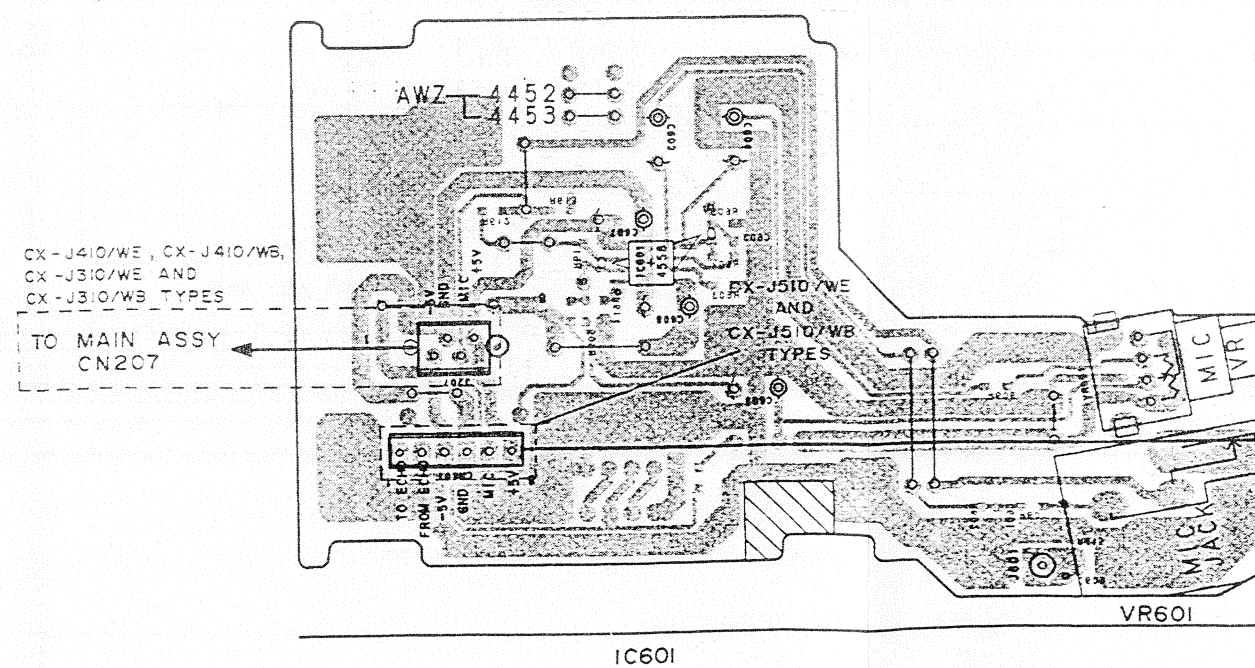


CX-J510/WE AND CX-J510/WB TYPES

BALANCE ASSY



MIC ASSY (AWZ4452: CX-J510/WE AND CX-J510/WB TYPES)
(AWZ4453: CX-J410/WE, CX-J410/WB,
CX-J310/WE AND CX-J310/WB TYPES)



IC601

VOLUME ASSY (AWZ4447: CX-J510/WE AND CX-J510/WB TYPES)
(AWZ4449: CX-J410/WE, CX-J410/WB,
CX-J310/WE AND CX-J310/WB TYPES)

VR801
ACX1077: CX-J510/WE AND CX-J510/WB TYPES
ACX1067: CX-J410/WE, CX-J410/WB, CX-J310/WE AND CX-J310/WB TYPES

IC801: VOLUME MOTOR DRIVE

IC802(1/2).(2/2):
FLAT AMP

Q801, Q802:
MUTE

CX-J510/WE
AND
CX-J510/WB
TYPES

Q803, Q804:
MUTE

IC803(1/2).(2/2): FLAT AMP

Q805: Q806:
BUFFER INVERTER

C828
0.047: CX-J510/WE AND
CX-J510/WB TYPES
0.01: CX-J410/WE,
CX-J410/WB,
CX-J310/WE AND
CX-J310/WB TYPES

CENTER OUT
CND
REAR OUT
+12V
R OUT
CND
L OUT
-12V
MOTOR +12V
MOTOR CND
VOL DOWN

TO MAIN ASSY(1/3)
CN210 (-P26)

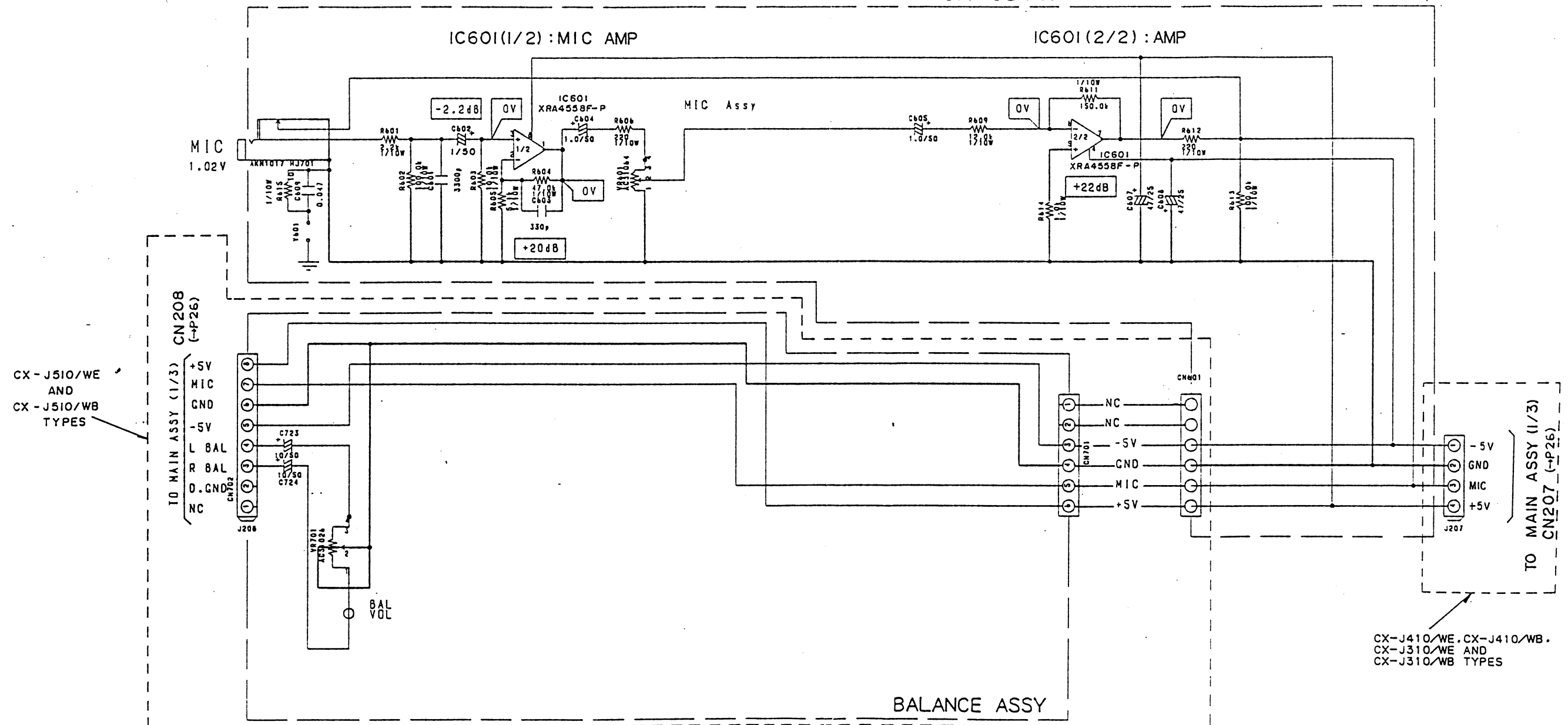
VOL UP
DIG CND
VOL POSITION
L IN
CND
R IN
MUTE
CND
CENTER IN
CND
REAR IN

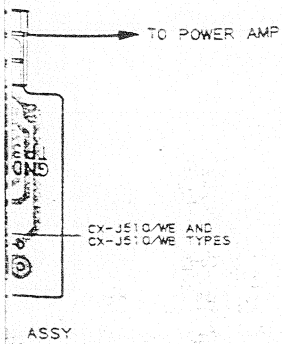
TO MAIN ASSY(1/3)
CN209 (-P26)

——: NORMAL SIGNAL (FRONT)
——: REAR
---: CENTER

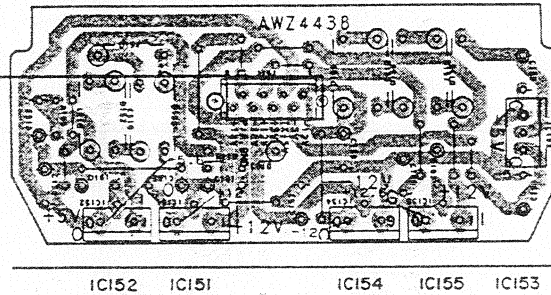


MIC ASSY (AWZ4452: CX-J510/WE AND CX-J510/WB TYPES)
(AWZ4453: CX-J410/WE, CX-J410/WB,
CX-J310/WE AND CX-J310/WB TYPES)



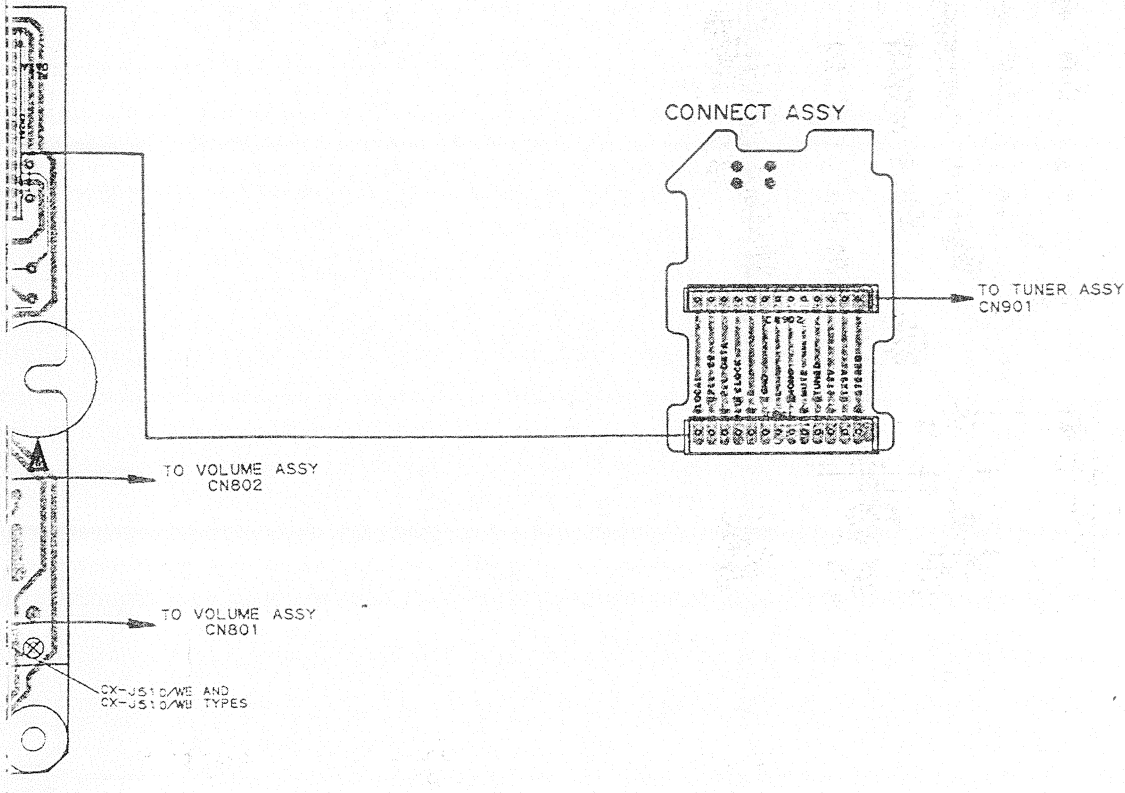


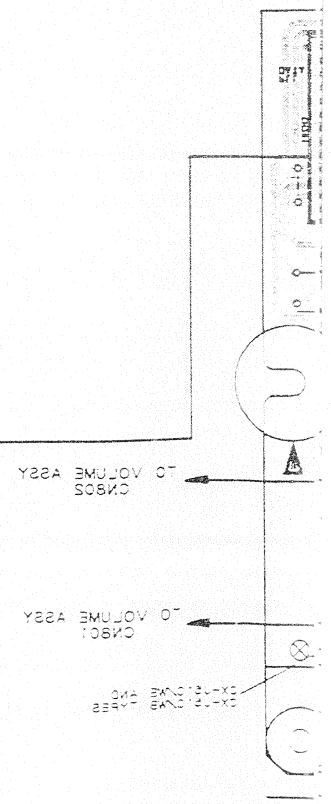
REGULATOR ASSY (AWZ4438)



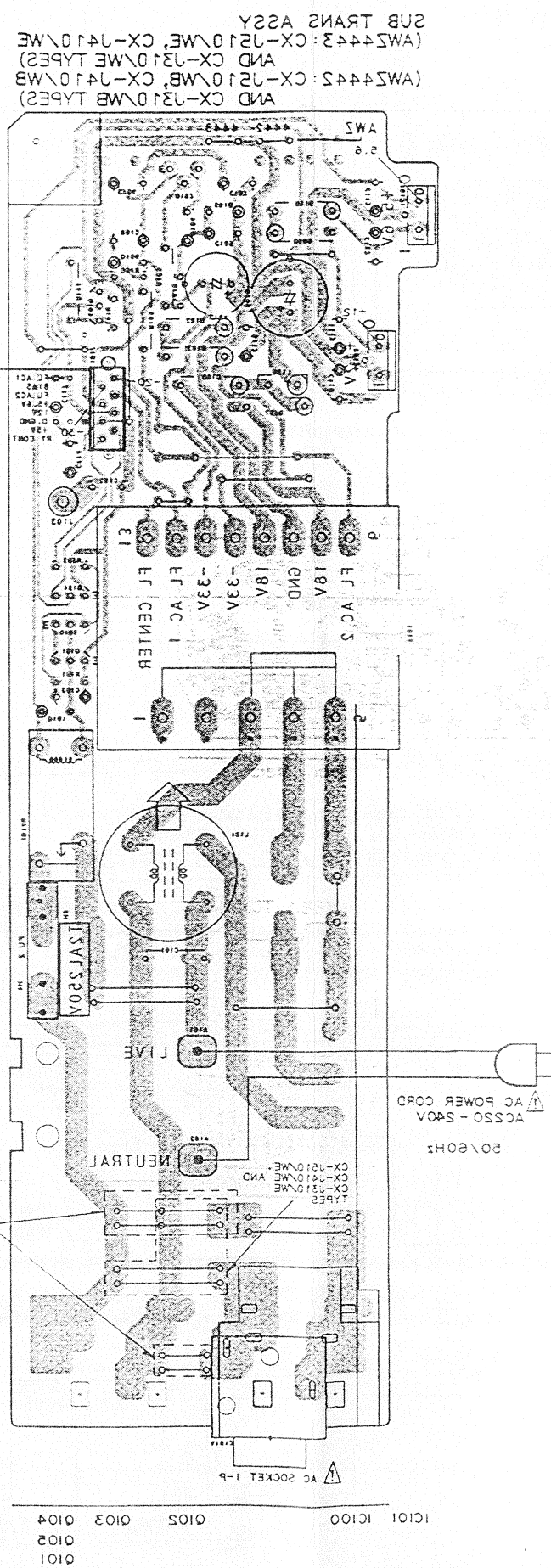
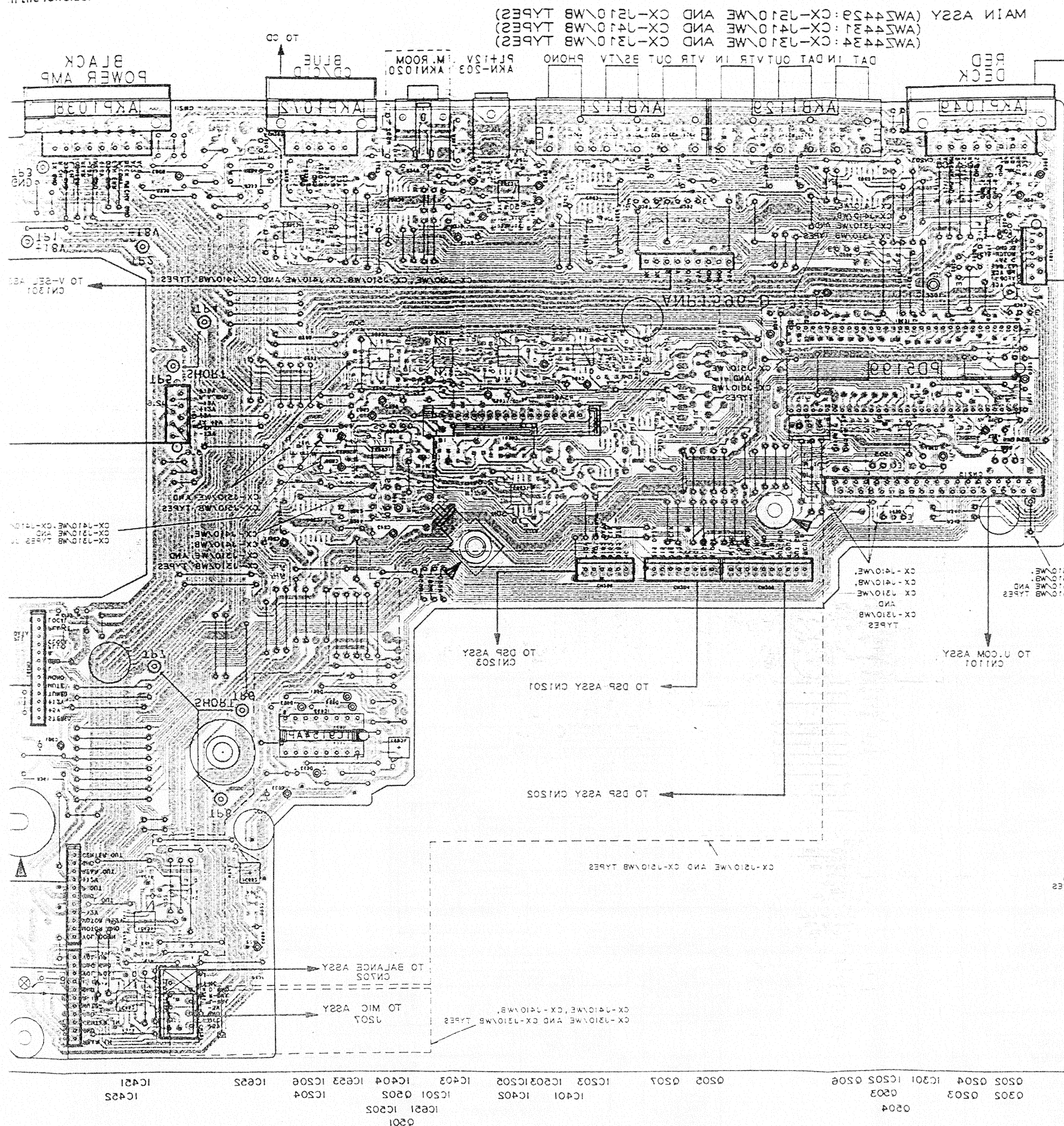
J410/WE.
ES Jumper

CONNECT ASSY

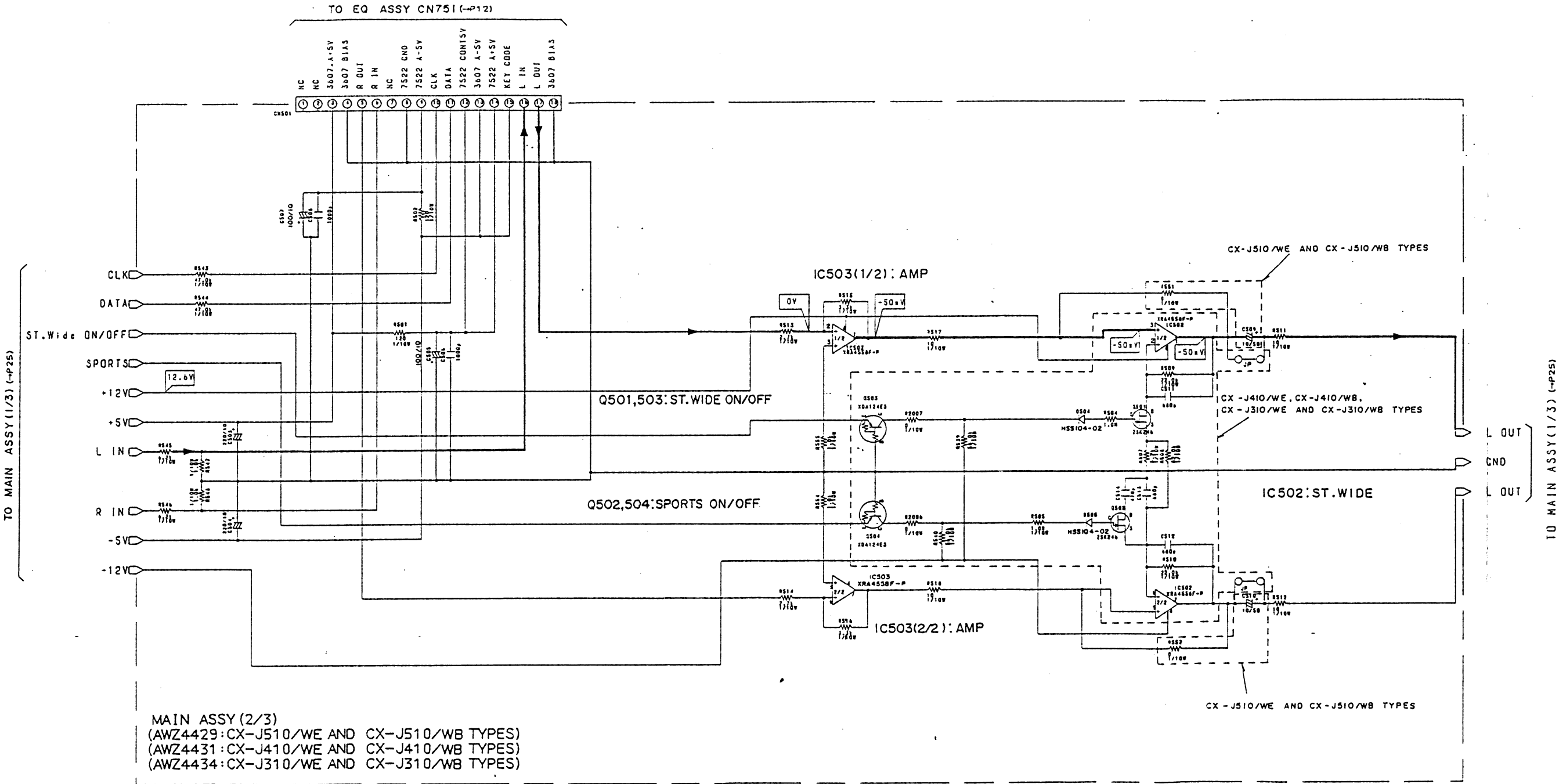




POWER AMP
BLACK



3.5 MAIN ASSY (2/3)(3/3), REGULATOR ASSY, SUB TRANS ASSY

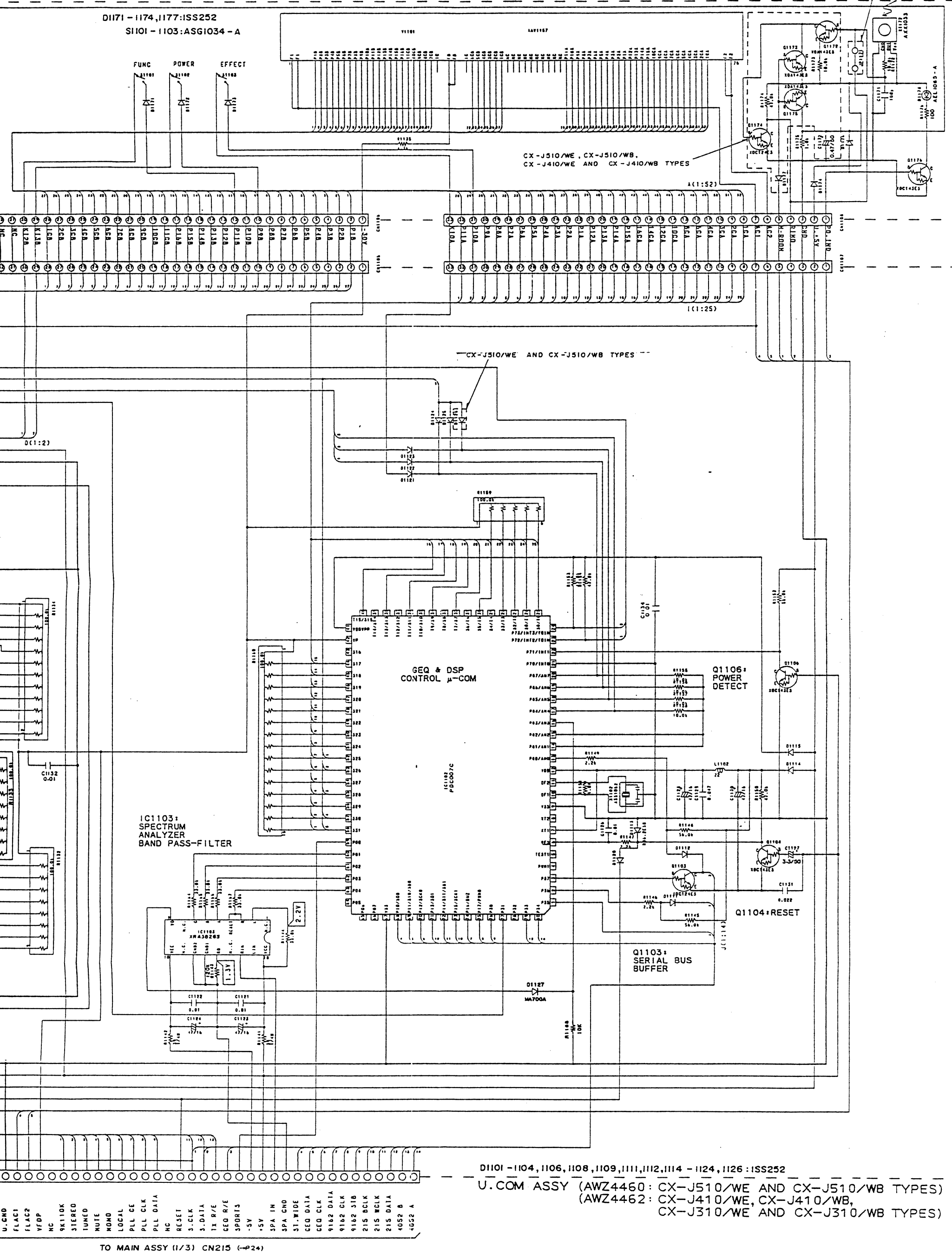


————:NORMAL SIGNAL (FRONT)

A
B
C
D
E
F



ASSY (AWZ4746: CX-J510/WE, CX-J510/WB, CX-J410/WE AND CX-J410/WB TYPES)
(AWZ4454: CX-J310/WE AND CX-J310/WB TYPES)



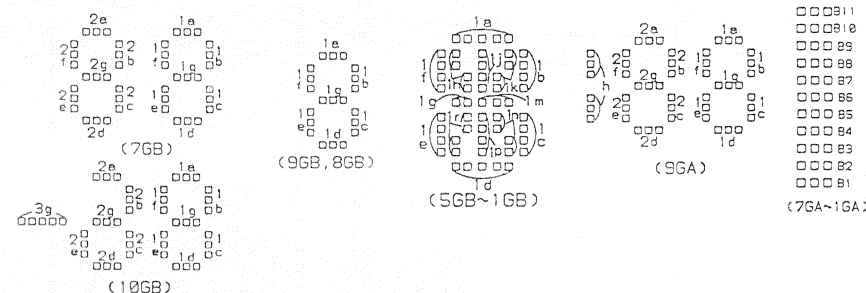
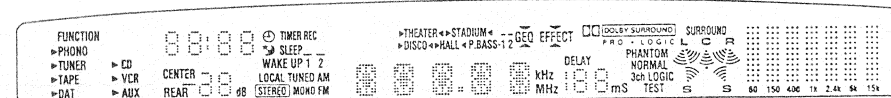
● AAV 1157 (V 1101) Display Segments

ANODE CONNECTION

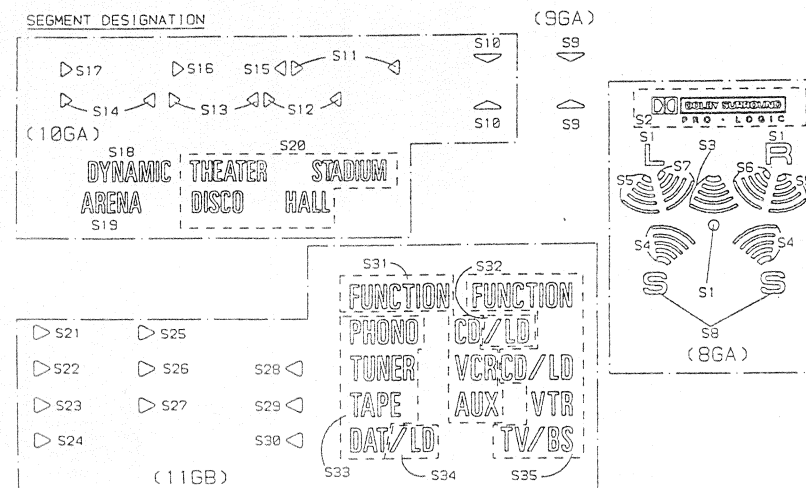
	10GA	9GA	8GA	7GA	6GA	5GA	4GA	3GA	2GA	1GA
P1A	S13	2g	S1	B1	B1	B1	B1	B1	B1	B1
P2A	S12	2f	S6	B2	B2	B2	B2	B2	B2	B2
P3A	P.BASS-12	2b	S7	B3	B3	B3	B3	B3	B3	B3
P4A	S15	2a	C	B4	B4	B4	B4	B4	B4	B4
P5A	S20	1b, 1e	3ch LOGIC	B5	B5	B5	B5	B5	B5	B5
P6A	S15	1a, 1f 1c, 1d	NORMAL	B6	B6	B6	B6	B6	B6	B6
P7A	S11	1g	PHANTOM	B7	B7	B7	B7	B7	B7	B7
P8A	- (1)	DELAY ms	-	B8	B8	B8	B8	B8	B8	B8
P9A	- (2)	S9	S2	B9	B9	B9	B9	B9	B9	B9
P10A	GEO EFFECT	SURROUND		B10	B10	B10	B10	B10	B10	B10
P11A	S10	-	TEST	B11	B11	B11	B11	B11	B11	B11
P12A	S14	h	S8	-	-	-	-	-	-	-
P13A	S19	2d	S4	-	-	-	-	-	-	-
P14A	S17	2e	S3	-	-	-	-	-	-	-
P15A	S18	2c	S5	CD	150	400	1k	2.4k	6k	15k

ANODE CONNECTION

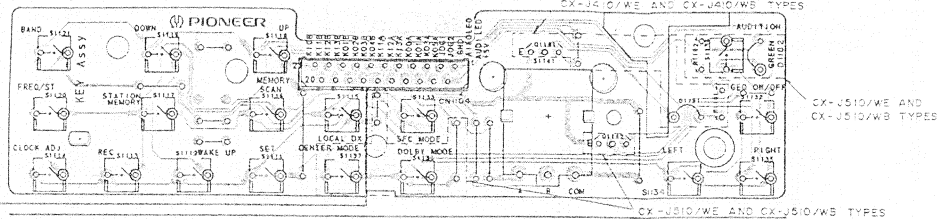
	11GB	10GB	9GB	8GB	7GB	6GB	5GB	4GB	3GB	2GB	1GB
P1B	S28	1a	1a	1a	1a	-	1a	1a	1a	1a	1a
P2B	S32	REAR	-	-	2a	TUNED	1j	1j	1j	1j	1j
P3B	S31	CENTER	-	-	-	REC	1h	1h	1h	1h	1h
P4B	S21	-	-	-	2b	MONO	1k	1k	1k	1k	1k
P5B	S25	1b	1b	1b	1b	- (1)	1b	1b	1b	1b	1b
P6B	S29	1f	1f	1f	1f	2 SLEEP	1f	1f	1f	1f	1f
P7B	S33	dB	-	-	2c	AM	1m	1m	1m	1m	1m
P8B	S26	1g	1g	1g	1g	⌚ TIMER	1g	1g	1g	1g	1g
P9B	S22	1c	1c	1c	1c	- (2)	1c	1c	1c	1c	1c
P10B	S30	1e	1e	1e	1e	STEREO	1e	1e	1e	1e	1e
P11B	S35	2e	-	-	2f	-	1r	1r	1r	1r	1r
P12B	S23	2b	-	-	2d	FM	1n	1n	1n	1n	1n
P13B	S27	2c	-	-	2e	-	1p	1p	1p	1p	1p
P14B	S24	2a, 2g, 2d	-	-	2g	-	-	-	-	-	kHz
P15B	S34	1d	1d	1d	1d	LOCAL	1d	1d	1d	1d	1d
P16B	-	3g	-	-	-	WAKE UP 1 2	-	-	-	-	MHz



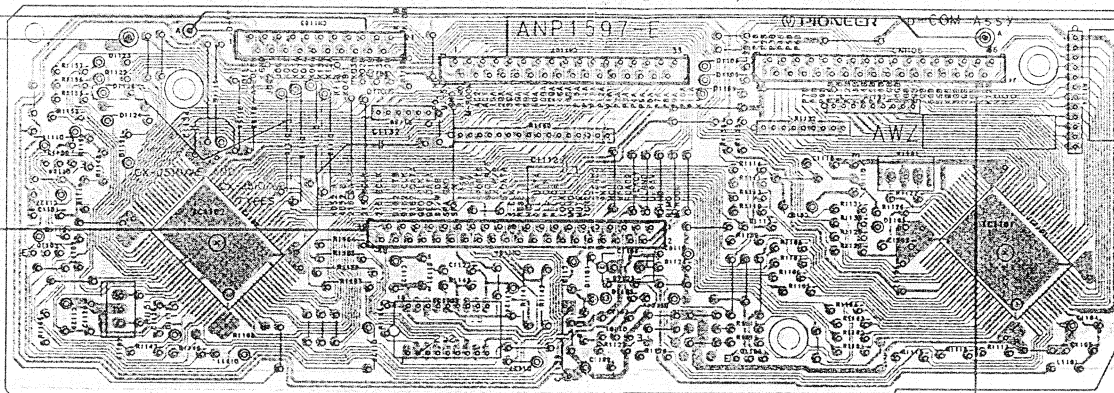
SEGMENT DESIGNATION



KEY ASSY

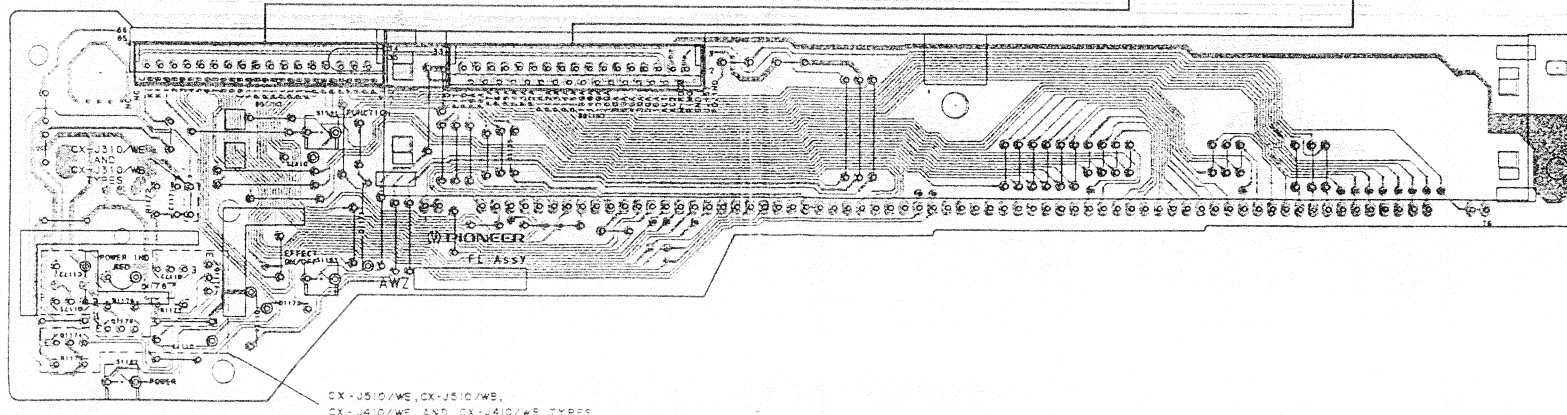


U.COM ASSY (AWZ4460: CX-J510/WE AND CX-J510/WB TYPES)
 (AWZ4462: CX-J410/WE, CX-J410/WB,
 CX-J310/WE AND CX-J310/WB TYPES)



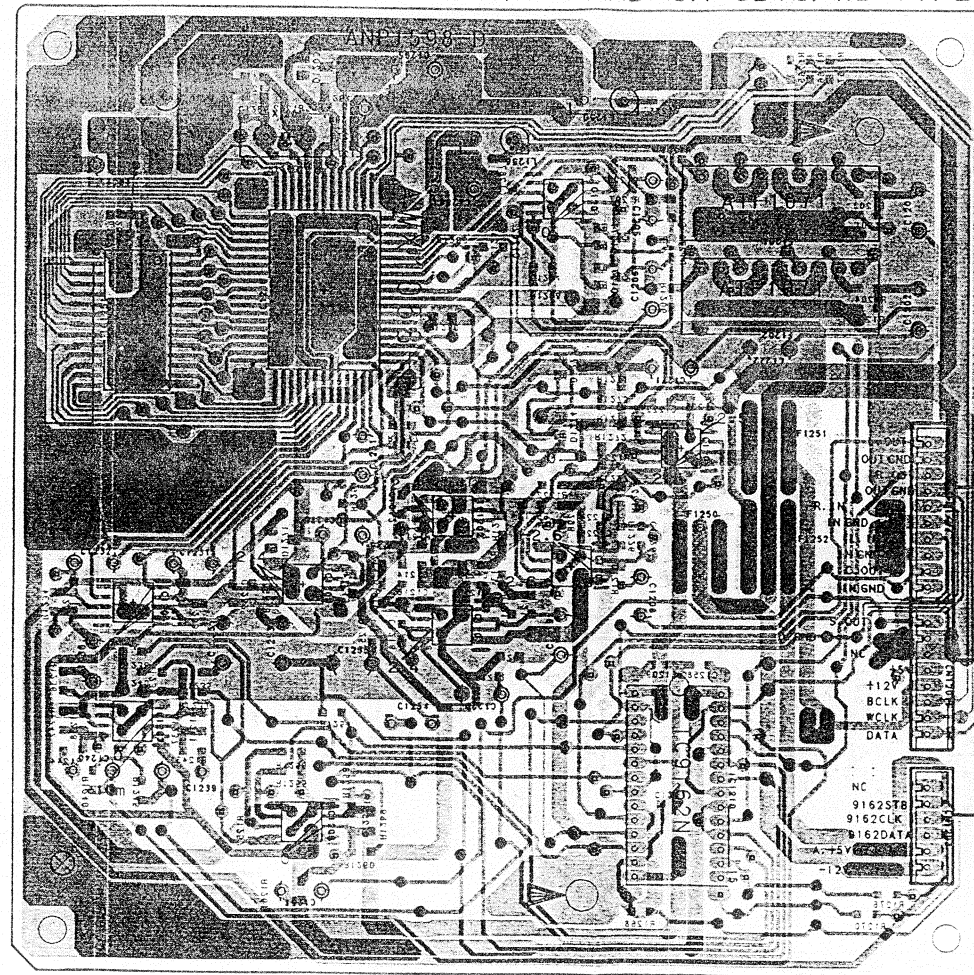
TO MAIN ASSY
 CN215

FL ASSY (AWZ4746: CX-J510/WE, CX-J510/WB CX-J410/WE AND CX-J410/WB TYPES)
 (AWZ4454: CX-J310/WE AND CX-J310/WB TYPES)

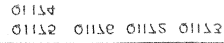


Q1175 Q1176 Q1172 Q1173
 Q1174

DSP ASSY (AWX1058: CX-J510/WE AND CX-J510/WB TYPES)

TO MAIN ASSY
CN205TO MAIN ASSY
CN204TO MAIN ASSY
CN206

IC1251	IC1250	IC1202	IC1201	IC1204
IC1206	IC1209	IC1203	IC1205	IC1210
IC1207	IC1208			



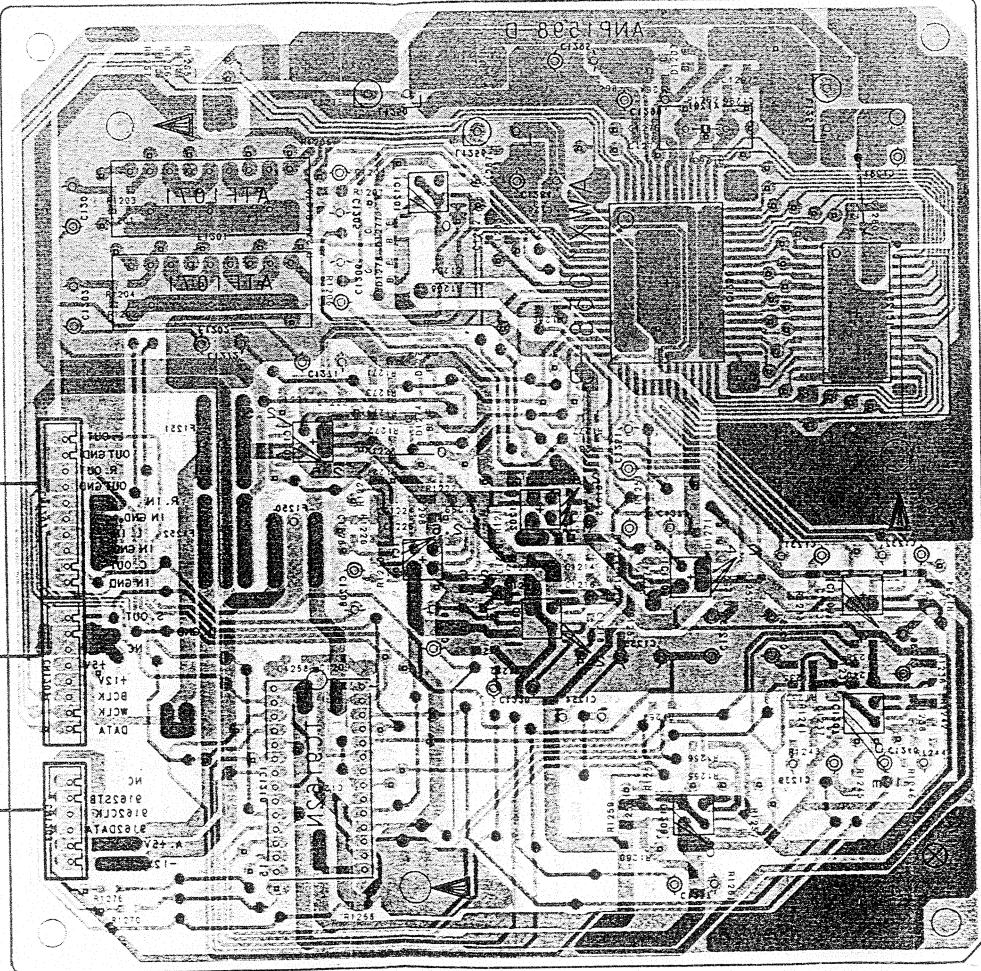
This P.C.B. connection diagram is viewed from the foil side.

DSP ASSY (AWX1028: CX-7210 WE AND CX-7210 WB TYPES)

← CDSOS NIAM OT
Y22A TO MAIN ASSY

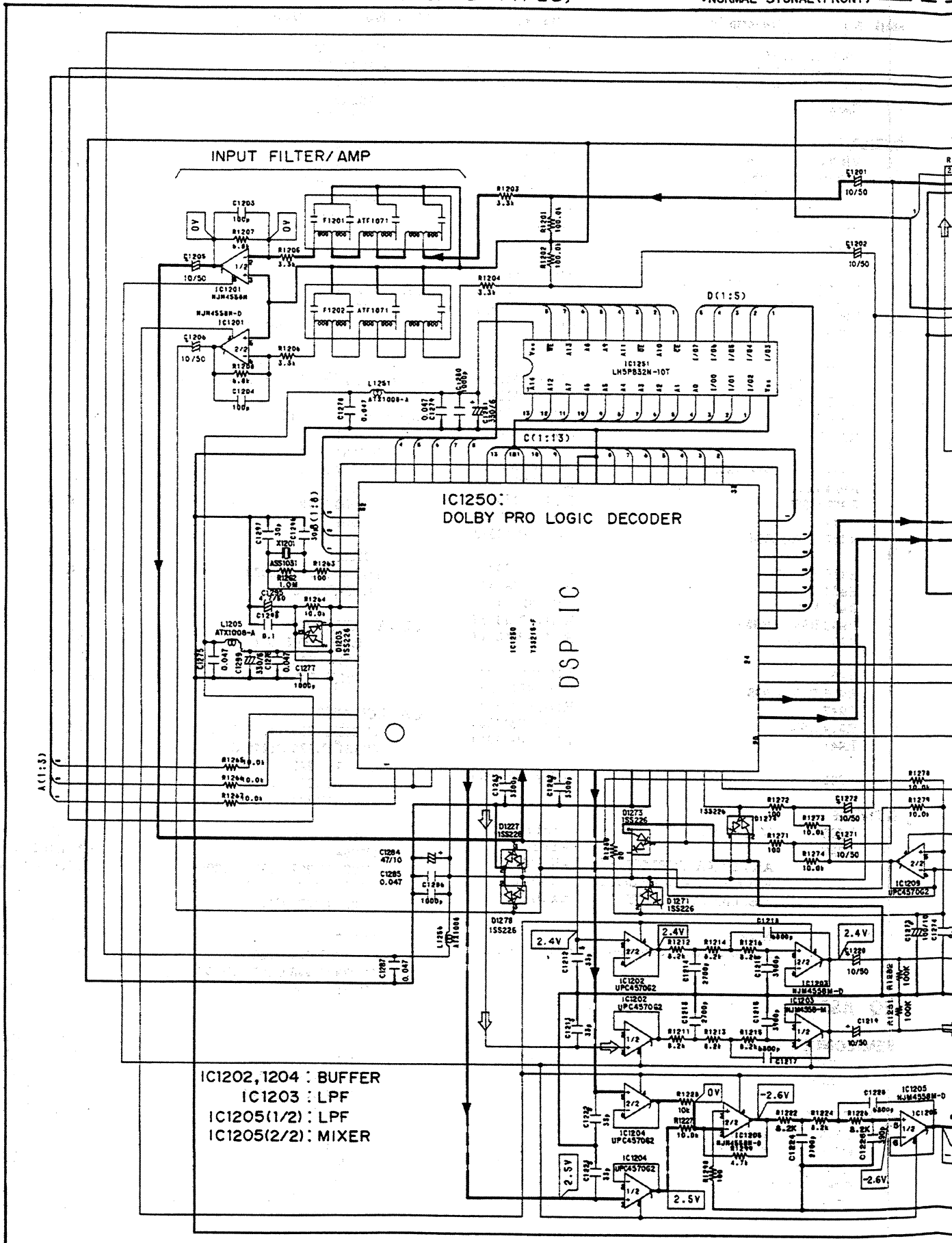
← CDSOS NIAM OT
Y22A TO MAIN ASSY

← CDSOS NIAM OT
Y22A TO MAIN ASSY

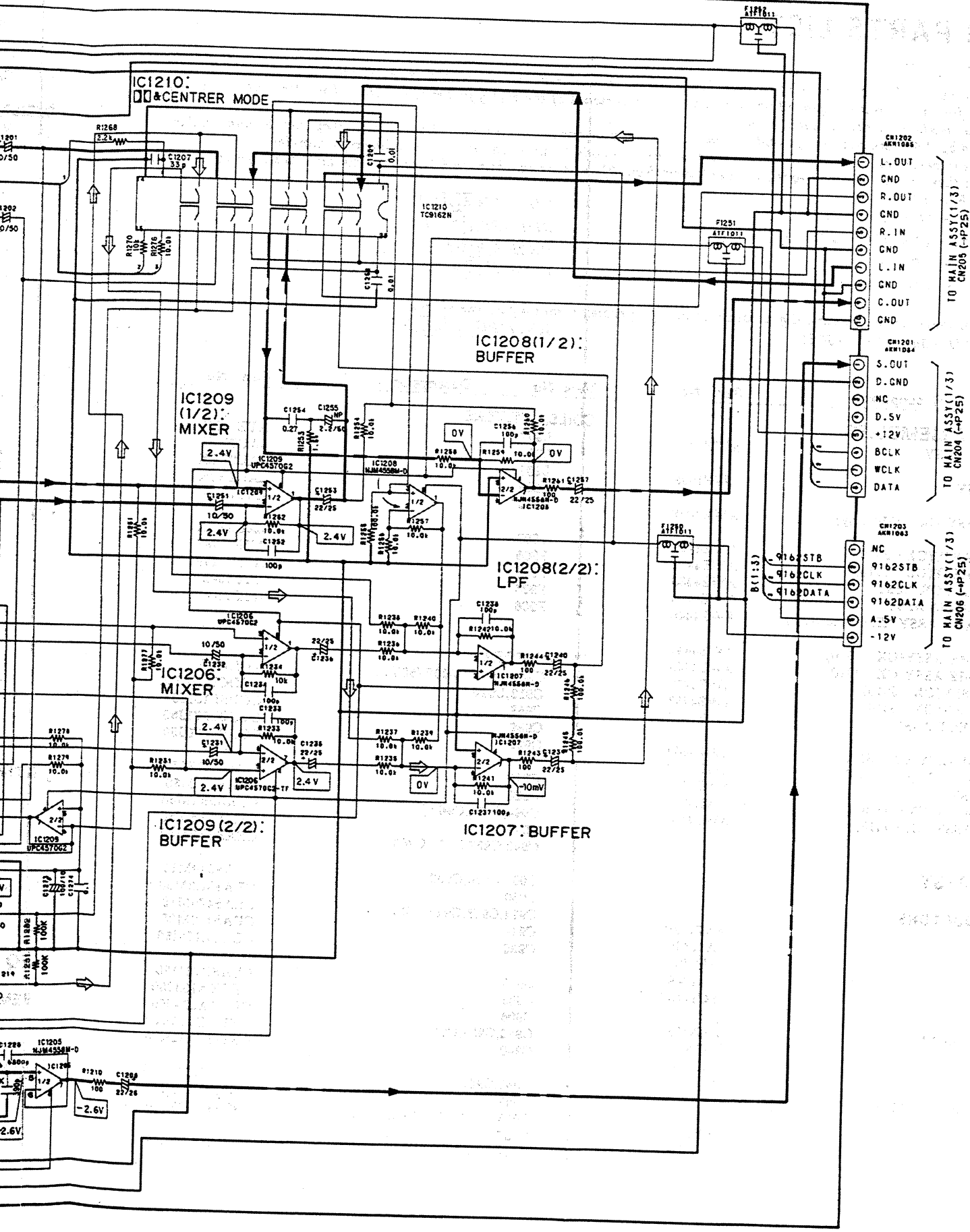


- IC1501
- IC1508
- IC1509
- IC1521
- IC1502
- IC1503
- IC1504
- IC1505
- IC1506
- IC1507
- IC1508
- IC1509
- IC1510
- IC1511
- IC1512
- IC1513
- IC1514
- IC1515
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- IC1586
- IC1587
- IC1588
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- IC1590
- IC1591
- IC1592
- IC1593
- IC1594
- IC1595
- IC1596
- IC1597
- IC1598
- IC1599
- IC1600

- :NORMAL SIGNAL (FRONT)



ONT) --- :REAR --- :CENTER --- :FRONT (SURROUND)



Mark No.	Description	Parts No.	Mark No.	Description	Parts No.
Q101,Q105		2SC2458	COILS, FILTERS		
Q104		XDC143ES	L801		LAU221K
D101,D104		HSS104-02	CAPACITORS		
D106		RD10ESB	C803-C806		CEAS100M50
D105		RD33ESB	C815,C816 (CX-J510 only)		CEAS100M50
D102,D103,D107-D110		S5566	C817,C818 (CX-J510 only)		CEAS101M25
			C831		CEAS101M25
RELAY			C801,C802		CEAS220M50
RY101		ASR1036	C811-C814 (CX-J510 only)		CEAS2R2M50
COILS, FILTERS			C807,C808		CEXA470M25
L101		ATF-151	C828 (CX-J410)		CKSQYB103K50
L102		ATX1008	C809,C810		CKSQYF104Z50
△ T101		ATT1202	C827		CKSQYF473Z50
CAPACITORS			C828 (CX-J510)		CKSQYF473Z50
△ C101 (0.01/AC400V)		ACG1003	RESISTORS		
C103		CEAS010M50	VR801 (100K-X4)(CX-J510)		ACX1077
C112		CEAS100M50	VR801 (CX-J410)		ACX1067
C114,C117		CEAS101M16	R813,R814		RD1/4PM121J
C106,C107		CEAS101M50	R831,R832 (CX-J510 only)		RD1/4PM121J
			Other Resistors		RS1/10S□□□J
C109		CEAS102M35	MIC ASSY		
C104		CEAS331M50	SEMICONDUCTORS		
C113		CEAS470M25	IC601		XRA4558F-P
C105,C108		CEAS470M50	CAPACITORS		
C110		CEHAQ100M50	C603		CCSLSL331J50
			C604,C605		CEAS010M50
C111		CEHAQ470M25	C602		CEAS100M50
C102,C116		CKCYF103Z50	C607,C608		CEAS470M25
RESISTORS			C601		CKSQYB332K50
R108		RD1/4PM102J	C609		CKSQYF473Z50
R105		RD1/4PM470J	RESISTORS		
R106		RD1/8PM203J	VR601 (10K-B)		ACS1064
R102,R107		RD1/8PM472J	Other Resistors		RS1/10S□□□J
R101		RD1/8PM473J	OTHERS		
R104		RD1/8PM622J	MIC JACK		AKN1017
R103		RFA1/4PS4R7J	CONNECT ASSY		
OTHERS			CONNECT assembly has no service part.		
△ AC SOCKET 1-P		AKP1034	U.COM ASSY		
BALANCE ASSY (CX-J510 ONLY)			SEMICONDUCTORS		
CAPACITORS			IC1102		PDC007C
C723,C724		CEAS100M50	IC1101		PDG089B
RESISTORS			IC1103		XRA3826S
VR701 (100K-X1)		ACS1026	Q1101		2SC2458
VOLUME ASSY			Q1103		XDC124ES
SEMICONDUCTORS			Q1102,Q1104-Q1106		XDC143ES
IC801		TA8409S	D1101-D1104,D1106,		1SS252
IC802		UPC4570G2	D1108,D1109,D1111,D1112,		
IC803 (CX-J510 only)		UPC4570G2	D1114-D1116,D1118,D1120-1124		
Q801,Q802		2SC2878	D1117,D1119,D1126 (CX-J510 only)		
Q803,Q804 (CX-J510 only)		2SC2878			
Q805		XDA124ES			
Q806		XDC143ES			

Mark No.	Description	Parts No.	Mark No.	Description	Parts No.
D1127		MA700A	SWITCHES		
D1105,D1113		RD6.2ESB	S1101-S1103		ASG1034
COILS, FILTERS			CAPACITORS		
L1101,L1102		LAU220K	C1171		CCCSL101J50
CAPACITORS			C1172		CEASR47M50
C1106		ACH1135	RESISTORS		
C1103		CCMSL101J50	R1176		RD1/8PM101J
C1101		CEAS010M50	R1172,R1173		RD1/8PM103J
C1107		CEAS100M50	R1135		RD1/8PM432J
C1127		CEAS3R3M50	R1174		RD1/8PM473J
C1104		CEAS470M16	OTHERS		
C1123,C1124,C1128,C1130		CEAS470M16	REMOTE RECEIVER UNIT		AXX1033
C1133		CEAS4R7M50	CN1106,CN1108 SOCKET(33P L)		AKP1108
C1102		CEJA2R2M50	V1101 FL TUBE		AAV1157
C1109,C1122,C1126		CKCYF102Z50	KEY ASSY		
C1110		CKCYF223Z50	SEMICONDUCTORS		
C1112		CKDYB102K50	Q1181		XDC143ES
C1121,C1132,C1134		CKDYF103Z50	Q1182 (CX-J510 only)		XDC143ES
C1131		CKDYX223M25	D1181		AEL1128
C1105,C1108,C1129		CKDYX473M25	D1182 (CX-J510 only)		AEL1128
RESISTORS			SWITCHES		
R1134		RA11T104J	S1111-S1121		ASG1034
R1160		RA15T104J	S1132-S1135		ASG1034
R1159		RA5T104J	S1136-S1138 (CX-J510 only)		ASG1034
R1132,R1133		RA8T104J	S1141		ASX1015
R1141,R1142		RD1/4PM390J	RESISTORS		
R1124		RD1/8PM101J	R1181		RD1/8PM221J
R1101-R1108		RD1/8PM102J	R1182 (CX-J510 only)		RD1/8PM221J
R1121,R1123,R1128-R1131,		RD1/8PM103J	OTHERS		
R1155-R1158,R1168		RD1/8PM104J	CN1104 SOCKET(21P L)		AKP1086
R1122		RD1/8PM105J			
R1127,R1151		RD1/8PM124J			
R1143		RD1/8PM222J			
R1109-R1111,R1126,R1136,		RD1/8PM333J			
R1146,R1147,R1149		RD1/8PM473J			
R1144,R1164-R1167		RD1/8PM563J			
R1115-R1120,R1125,R1150,					
R1153,R1154					
R1112-R1114,R1145,R1148,					
R1152					
OTHERS					
X1101 (8.00MHz)		ASS1015			
X1102 (12MHz)		ASS1062			
CN1103 SOCKET(21P)		AKP1084			
CN1101 SOCKET(40P)		AKP1085			
CN1105,CN1107 SOCKET(33P)		AKP1104			
FL ASSY					
SEMICONDUCTORS					
Q1172,Q1173,Q1175		XDA143ES			
Q1174		XDC124ES			
Q1176		XDC143ES			
D1171-D1174,D1177		1SS252			
D1178		AEL1065			

5. HOW TO CHECK THE PRODUCT INDEPENDENTLY

Use the following procedure to check the basic operations of this product standing alone.

1. Short the base of MAIN assembly Q201 and Q202 to the solder plating line according to the arrows on the board (to put the unit in the same state as when a CD player and a cassette deck are connected).

2. Supply +18V to TP1 of MAIN assembly and -18V to TP2 and connect TP3 to the ground for these power supplies. (This substitutes for the power supply fed from the power amp through CN211.)

3. Short MAIN assembly TP4-TP8 (to make the ground common).

4. Plug the power cord into a power socket.

Note 1: After the check is complete, be sure to undo the connections made in 1, 2 and 3 above.

Note 2: Make the final operations check on the product by connecting the specified components.

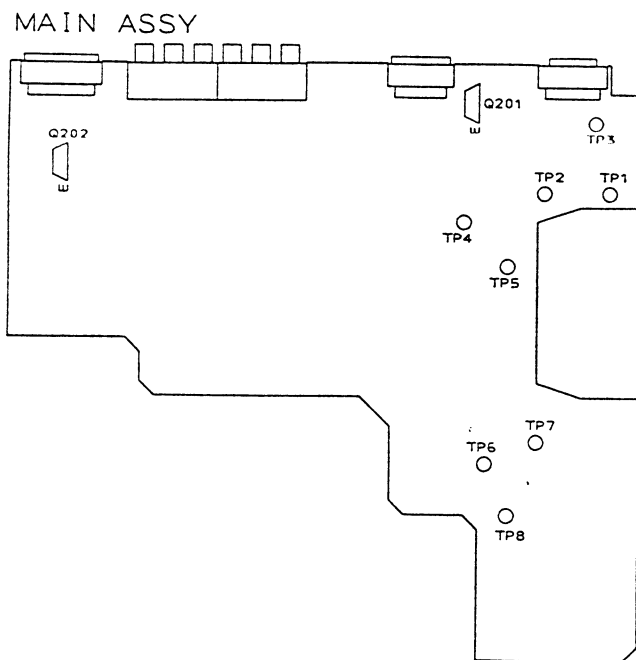


Fig. 5-1. Connection Locations

6. ADJUSTMENTS

● As to connections and points to be adjusted, refer to Fig. 1 and Fig. 2.

6.1 AM TUNER ADJUSTMENT

● Set the BAND selector to "AM".

Step No.	Adjustment Title	AM SG(400Hz, 30% modulation)		Reception Frequency Display	Adjustment	
		Frequency(kHz)	Level(dBμV/m)		Adjustment Location	Specifications
1	TUNED indicator sensitivity adjustment	999	55 (± 5 dB)	999kHz	VR901	Adjust so that the indicator lights up.

6.2 FM TUNER ADJUSTMENT

● Set the BAND selector to "FM".

● Perform VCO adjustment two minutes or more after turning the power ON.

Note: Stereo modulation: Main 1 kHz L + R ± 68.25 kHz dev.

Pilot 19 kHz ± 6.75 kHz dev.

Step No.	Adjustment Title	FM SG(1kHz±75kHz dev.)		Reception Frequency Display	Adjustment	
		Frequency(MHz)	Level(dBμV)		Adjustment Location	Specifications
1	Detector coil T-meter adjustment	98.0	80	98.0MHz	L907	Adjust so that the DC voltage between TP901 and TP902 is ± 50mV.
2	VCO adjustment	98.0 (No modulation)	80	98.0MHz	VR903	Adjust so that the frequency between TP905 and GND is 76 kHz ± 0.5kHz
3	TUNED indicator sensitivity adjustment	98.0	18 (± 3 dB)	98.0MHz	VR902	Adjust so that the indicator lights up.

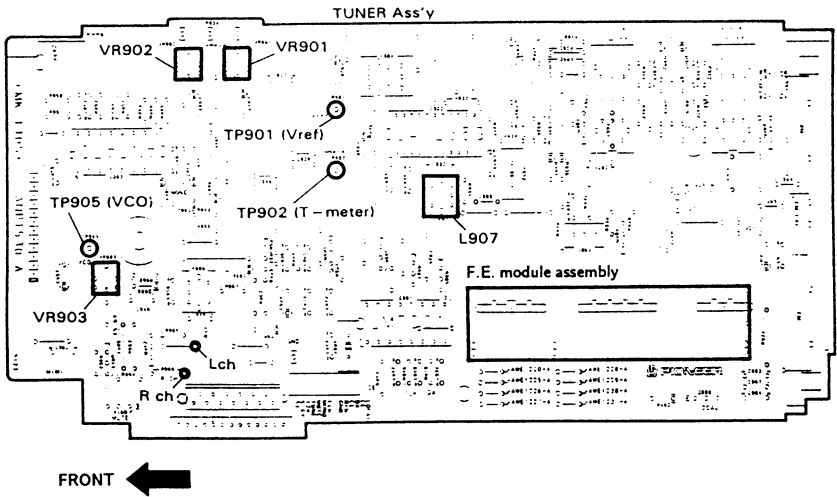


Fig. 1 Adjustment Points

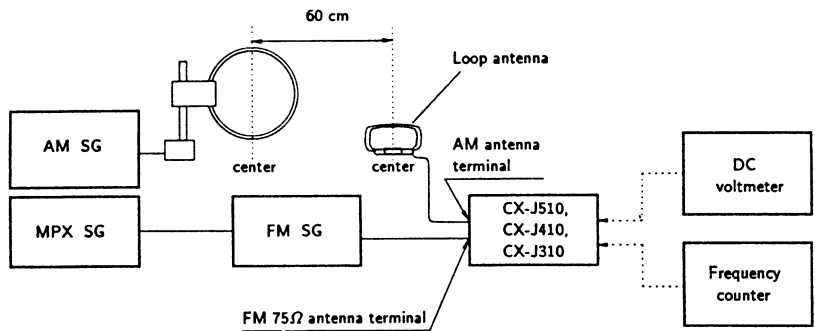


Fig. 2 Connection Diagram

7. IC INFORMATION

The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

- PDC007C (IC1102)
- System Control μ - COM

Pin Function

Pin	Pin Name	I/O	Function
1	P35	I/O	System Bus request/enable
2	P36	I	System Bus system clock input
3	P37	O	System Bus data output
4	PWM1	O	Not used (Open)
5	TEST1	O	Not used (Open)
6	RESET	I	Reset input ACTIVE : L
7	XT1	I	Not used (GND)
8	XT2	O	Not used (Open)
9	VSS	-	GND
10	CF1	I	12 MHz Ceramic Oscillator connection
11	CF2	O	
12	VDD	-	+5.6 V power supply input
13	P80/AN0	I	System Bus data input
14	P81/AN1	O	Not used (GND)
15	P82/AN2	O	Not used (GND)
16	P83/AN3	I	Analog input for the Spectrum Analyzer
17	P84/AN4	I	Key scan input (KI 0)
18	P85/AN5	I	Key scan input (KI 2)
19	P86/AN6	I	Key scan input (KI 1)
20	P87/AN7	I	Key scan input (KI 0)
21	P70/INT0	I	Not used (+5.6 V)
22	P71/INT1	I	AC pulse input
23	P72/INT2	I	Rotary pulse encoder A input
24	P73/INT3	I	Rotary pulse encoder B input
25	S0/T0	DP	FL display tube grid output (G1)
26	S1/T1	DP	FL display tube grid output (G2)
27	S2/T2	DP	FL display tube grid output (G3)
28	S3/T3	DP	FL display tube grid output (G4)
29	S4/T4	DP	Not used (Open)
30	S5/T5	DP	FL display tube grid output (G6)
31	S6/T6	DP	Not used (Open)
32	T7/S7	DP	FL display tube grid output (G8)
33	T8/S8	DP	Not used (Open)
34	T9/S9	DP	FL display tube grid output (G10)
35	T10/S10	DP	Not used (Open)
36	T11/S11	DP	FL display tube grid output (G12)
37	T12/S12	DP	Not used (Open)
38	T13/S13	DP	FL display tube grid output (G14)
39	T14/S14	DP	Not used (Open)
40	T15/S15	DP	FL display tube grid output (G16)

Pin	Pin Name	I/O	Function
41	VDDVPP	-	A/D reference voltage (+5.6 V)
42	VP	-	Minus power supply for FL tube
43	S16	DP	Not used (Open)
44	S17	DP	FL segment output (S15)
45	S18	DP	FL segment output (S14)
46	S19	DP	FL segment output (S13)
47	S20	DP	FL segment output (S12)
48	S21	DP	FL segment output (S1)
49	S22	DP	FL segment output (S2)
50	S23	DP	FL segment output (S3)
51	S24	DP	FL segment output (S4)
52	S25	DP	FL segment output (S5)/ Key scan output (KO0)
53	S26	DP	FL segment output (S6)/ Key scan output (KO1)
54	S27	DP	FL segment output (S7)/ Key scan output (KO2)
55	S28	DP	FL segment output (S8)/ Key scan output (KO3)
56	S29	DP	FL segment output (S9)/ Key scan output (KO4)
57	S30	DP	FL segment output (S10)/ Key scan output (KO5)
58	S31	DP	FL segment output (S11)/ Key scan output (KO6)
59	P00	O	Sports ON/OFF output (CX - J310, CX - J410, CX - J710 only)

I: CMOS input
O: CMOS output
DP: Pch Open drain output with pull down resistor

Pin	Pin Name	I/O	Function
60	P01	O	BA3826S C output
61	P02	O	BA3826S B output
62	P03	O	BA3826S A output
63	P04	O	BA3826S Reset output ACTIVE: H
64	P05	O	Not used (Open)
65	P06	O	
66	P07	O	
67	VSS	—	GND
68	P10/S00	O	ST. WIDE ON/OFF output (CX - J310, CX - J410, CX - J710 only)
69	P11/S10	O	STK301 Data output
70	P12/SCK0	O	STK301 Clock output
71	P13/S01	O	M66320 STB output (CX - J710 only)
			YSS215 CD output (CX - J510, CX - J910 only)
72	P14/S11	O	M66320 Data output (CX - J710 only)
			YSS215 WCK output (CX - J510, CX - J910 only)
73	P15/SCK1	O	M66320 Clock output (CX - J710 only)
			YSS215 BCK output (CX - J510, CX - J910 only)
74	P16/BUZ	O	TS9162 Data output
75	P17/PWM0	O	TC9162 Clock output
76	P30	O	TC9162 STB output
77	P31	O	Audition ON/OFF output
78	P32	O	Not used (Open)
79	P33	O	14052 B output
80	P34	O	14052 A output

I: CMOS input

O: CMOS output

DP: Pch Open drain output with pull down resistor

■ PDG089B (IC1101)

● System Control μ - COM

Pin Function

Pin	Pin Name	I/O	Function
1	PE3	I	Channel step (10/9 kHz) select input
2	PE4	I	STEREO signal input
3	PE5	I	TUNED signal input
4	PE6	O	TUNER MUTE output
5	PE7	O	FM MONO output
6	PB0	O	Not used (Open)
7	PB1	I	J/EX input
8	PB2	I	LW Exist/Not Exist input
9	PB3	O	Local and Narrow output
10	PB4	O	PLL CE output (LM7001)
11	PB5	O	PLL CLK output (LM7001)
12	PB6	O	AMP μ com reset output
13	PB7	O	PLL DATA output (LM7001)
14	PC0	I	System Bus CLK input
15	PC1	I/O	System Bus Data input/output
16	PC2	O	System Bus REQ output
		I	System Bus Enable input
17	PC3	I	Power ON/OFF input
18	PC4	I	Key scan input
19	PC5	I	
20	PC6	I	
21	PC7	I	Function LED ON/OFF
22	PA0	O	
23	PA1	O	
24	PA2	O	
25	PA3	O	
26	PA4	O	
27	PA5	O	
28	PA6	O	Not used (Open)
29	PA7	O	
30	RST	I/O	Reset input
31	EXTAL	I	8MHz Ceramic Oscillator connection
32	XTAL	O	
33	Vss	—	GND
34	PD0	DP	Not used (Open)
35	PD1	DP	
36	PD2	DP	
37	PD3	DP	
38	PD4	DP	
39	PD5	DP	

Note 1:

	Pin 77(PG3)	Pin 76(PG2)	Pin 7(PB1)
CX - J310, CX - J410	H	L	L
CX - J510	H	H	L
CX - J710, CX - J910	H	H	H

Pin	Pin Name	I/O	Function
40	PD6	DP	Not used (Open)
41	PD7	DP	
42	S8	DP	
43	S9	DP	Segment output
44	S10	DP	
45	S11	DP	
46	S12	DP	
47	S13	DP	Segment output / Key scan output
48	S14	DP	
49	S15	DP	
50	S16	DP	
51	S17	DP	Segment output
52	S18	DP	
53	S19	DP	
54	S20	DP	
55	S21	DP	Not used (Open)
56	S22	DP	
57	S23	DP	
58	T12	DP	FL grid output (11G)
59	T11	DP	
60	T10	DP	
61	T9	DP	
62	T8	DP	
63	T7	DP	
64	T6	DP	
65	T5	DP	
66	T4	DP	
67	T3	DP	
68	T2	DP	
69	T1	DP	
70	T0	DP	
71	Vfdp	—	
72	Vdd	—	
73	N.C.	—	
74	PG0	O	
75	PG1	I	
76	PG2	I	
77	PG3	I	
78	PE0	I	
79	PE1	I	
80	PE2	I	

I: CMOS input

O: CMOS output

DP: Pch Open drain output with pull down resistor

■ PD5199A (IC301)

● System Control μ - COM

Pin Function

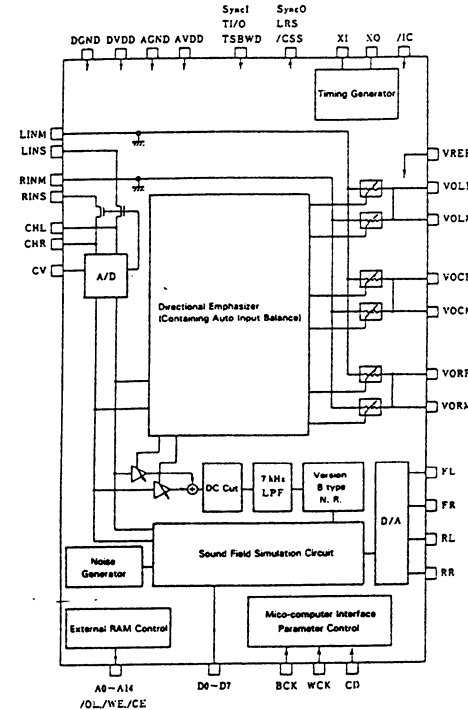
Pin	Pin Name	Function
1	Vcc	+5V power supply
2	Vref	
3	AVss	GND
4	P67/AN7 FUN Detect 1	Select FUN operation/Power off/ Normal operation from A/D input value.
5	P66/AN6 FUN Detect 2	
6	P65/AN5 Power Detect	Power off when 3 seconds keeps "H" after 500 ms from power on.
7	P64/AN4 FUN drive	FUN ON/OFF
8	P63/AN3 VOLUME POS	A/D input for VR position detection.
9	P62/AN2 VOLUME DOWN	Motor VR down. ACTIVE: H
10	P61/AN1 VOLUME UP	Motor VR up. ACTIVE: H
11	P60/AN0 LINE MUTE	Line muting output ACTIVE: L
12	P57 REMOCON IN	SR signal input ACTIVE: L
13	P56	N.C.
14	P55 P.BASS1	P.BASS 1 ON/OFF
15	P54 P.BASS2	P.BASS 2 ON/OFF
16	P53 ST	Center/Rear volume control TC9154 ST
17	P52 CLK	Center/Rear volume control TC9154 CLK
18	P51 DATA	Center/Rear volume control TC9154 DATA
19	P50/SIN2	N.C.
20	P47/SRDV1 DECK	System bus Enable/Request (For DECK)
21	P46/SCLK1 CD	System bus Enable/Request (For CD)
22	P45/TxD TUNER	System bus Enable/Request (For TUNER)
23	P44/RxD GEQ	System bus Enable/Request (For GEQ)
24	P43/INT2 S.DATA	System bus Enable/Request (For S DATA)
25	P42/INT1	N.C.
26	CNVs	GND.
27	RESET	RESET input
28	P41/INT0 JOG1	For Center/Rear level.

Pin	Pin Name	Function
29	P40/INT4 JOG2	For Center/Rear level.
30	Xin	Oscillator 8 MHz
31	Xout	
32	Vss	GND
33	P27/DB7	
34	P26/DB6	Destination select
35	P25/DB5	
36	P24/DB4	
37	P23/DB3	
38	P22/DB2	N.C.
39	P21/DB1	
40	P20/DB0	
41	P17/AD15	
42	P16/AD14	N.C.
43	P15/AD13	
44	P14/AD12	
45	P13/AD11 V-SEL A	Video function control.
46	P12/AD10 V-SEL B	
47	P11/AD9 REC MUTE	Video Rec out muting ACTIVE: H
48	P10/AD8 4052 INH	4052 INH Function control
49	P07/AD7 4052 B	4052 B Function control
50	P06/AD6 4052 A	4052 A Function control
51	P05/AD5	
52	P04/AD4	
53	P03/AD3	N.C.
54	P02/AD2	
55	P01/AD1	
56	P00/AD0	
57	P37/RD	
58	P36/WR LED P.BASS 2	P.BASS 2 LED display ACTIVE: H
59	P35/SYNC LED P.BASS 1	P.BASS 1 LED display ACTIVE: H
60	P43/ ϕ HEADPHONE	HEADPHONE input ACTIVE: L
61	P33/RESET out RELAY D	Rear AMP speaker RY ACTIVE: L
62	P32/ONW RELAY A	Front AMP speaker RY ACTIVE: L
63	P31/DA1 POWER IND	POWER IND LED ACTIVE: L
64	P30/DA1 POWER RY	AC RY ACTIVE: H

■ YSS215 - F (IC1250: CX-J510 only)

● Dolby Pro-logic Decoder

● Block Diagram



● Pin Function

No.	Name	I/O	Description
1	CD	I	Serial data of parameter data input.
2	TSBWD	I	LSI test terminal. Normally connect to DVDD.
3	T/I/O	I	LSI test terminal. Normally connect to DVDD.
4	AVDD	—	+5V power supply (A/D, D/A)
5	RL	O	RL channel D/A output
6	FL	O	FL channel D/A output
7	CHL	—	LINS input sample/hold capacitor external terminal.
8	LINS	I	L channel A/D input
9	RINS	I	R channel A/D input
10	CHR	—	RINS input sample/hold capacitor external terminal.
11	FR	O	FR channel D/A output
12	RR	O	RR channel D/A output
13	CV	O	A/D, center power voltage of the multiplying DAC.
14	AGND	—	GND (A/D, D/A)
15	AGND	—	GND (multiplying DAC)
16	VREF	I	Reference power voltage input of the multiplying DAC.
17	LINM	I	L channel multiplying DAC input
18	RINM	I	R channel multiplying DAC input
19	VOLM	O	L channel operational amplifier. Connect to the negative (-) terminal.
20	VOLP	O	L channel operational amplifier. Connect to the positive (+) terminal.
21	VOCM	O	C channel operational amplifier. Connect to the negative (-) terminal.
22	VOCN	O	C channel operational amplifier. Connect to the positive (+) terminal.

No.	Name	I/O	Description
23	VORM	O	R channel operational amplifier. Connect to the negative (-) terminal.
24	VORP	O	R channel operational amplifier. Connect to the positive (+) terminal.
25	AVDD	—	+5V power supply (multiplying DAC)
26	DVDD	—	+5V power supply (digital)
27	D7	I/O	External delay RAM data terminal
28	D6	I/O	
29	D5	I/O	
30	D4	I/O	
31	D3	I/O	
32	D2	I/O	
33	D1	I/O	
34	D0	I/O	
35	A0	O	External delay RAM address terminal
36	A1	O	
37	A2	O	
38	A3	O	
39	A4	O	
40	DGND	—	GND (digital)
41	DGND	—	
42	A5	O	External delay RAM address terminal
43	A6	O	
44	A7	O	
45	A12	O	
46	A14	O	External delay RAM write enable terminal
47	WE	O	

No.	Name	I/O	Description
48	A13	O	External delay RAM address terminal
49	A8	O	
50	A9	O	
51	A11	O	External delay RAM output enable terminal
52	OE	O	
53	A10	O	External delay RAM address terminal
54	CE	O	External delay RAM chip enable terminal
55	XO	O	Crystal oscillator connection terminal
56	XI	I	Crystal oscillator connection terminal (11.2896MHz)
57	SyncI	I	Test terminal for system cycle. Normally connect to DVDD.
58	DVDD	—	+5V power supply (digital)
59	SyncO	O	Test terminal for system cycle. Normally do not connect.
60	IC	I	Initial clear terminal. Requires to be reset when the power is turned ON.
61	LRS	O	External auto input balance terminal. Normally do not connect.
62	CSS	O	
63	BCK	I	Parameter data input bit clock
64	WCK	I	Parameter data input word clock

8. FOR CX-J510/WB,CX-J410/WB,CX-J310/WE AND WB

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

8.1 CONTRAST OF MISCELLANEOUS PARTS FOR CX - J510/WB

CX - J510/WB and CX - J510/WE have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		CX - J510/WE	CX - J510/WB	
⊙	SUB TRANS assembly	AWZ4443	AWZ4442	
Δ NSP	AC power cord Rear Panel(MTL)	ADG1049 ANC1963	ADG1118 ANC1965	

SUB TRANS ASSEMBLY

AWZ4442 and AWZ4443 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4443	AWZ4442	
Δ	AC SOCKET 1-P	AKP1034	AKP1035	

8.2 CONTRAST OF MISCELLANEOUS PARTS FOR CX - J410/WB, CX - J310/WE AND WB

CX - J410/WB, CX - J310/WE, WB and CX - J410/WE have the same construction except for the following :

Mark	Symbol & Description	Part No.				Remarks
		CX - J410/WE	CX - J410/WB	CX - J310/WE	CX - J310/WB	
⊙	SUB TRANS assembly	AWZ4443	AWZ4442	AWZ4443	AWZ4442	
⊙	MAIN assembly	AWZ4431	AWZ4431	AWZ4434	AWZ4434	
⊙	FL assembly	AWZ4746	AWZ4746	AWZ4454	AWZ4454	
NSP	KEY assembly	AWZ4456	AWZ4456	AWZ4457	AWZ4457	
Δ NSP	Audition Button (PLS)	AAD2342	AAD2342	.....	.....	
	AC power cord	ADG1049	ADG1118	ADG1049	ADG1118	
	Packing case(PAP)	AHD2482	AHD2482	AHD2480	AHD2480	
	Front Panel(PLS)	AMB2051	AMB2051	AMB2053	AMB2053	
	Sub panel assembly	AMR2476	AMR2476	AMR2475	AMR2475	
NSP	Rear Panel(MTL)	ANC1967	ANC1969	ANC1971	ANC1973	

SUB TRANS ASSEMBLY

AWZ4442 and AWZ4443 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4443	AWZ4442	
△	AC SOCKET 1-P	AKP1034	AKP1035	

MAIN ASSEMBLY

AWZ4434 and AWZ4431 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4431	AWZ4434	
	R356	RS1/10S102J	.....	
	MINI JACK (MULTI-ROOM)	AKN1020	.....	

FL ASSEMBLY

AWZ4454 and AWZ4746 have the same construction except for the following :

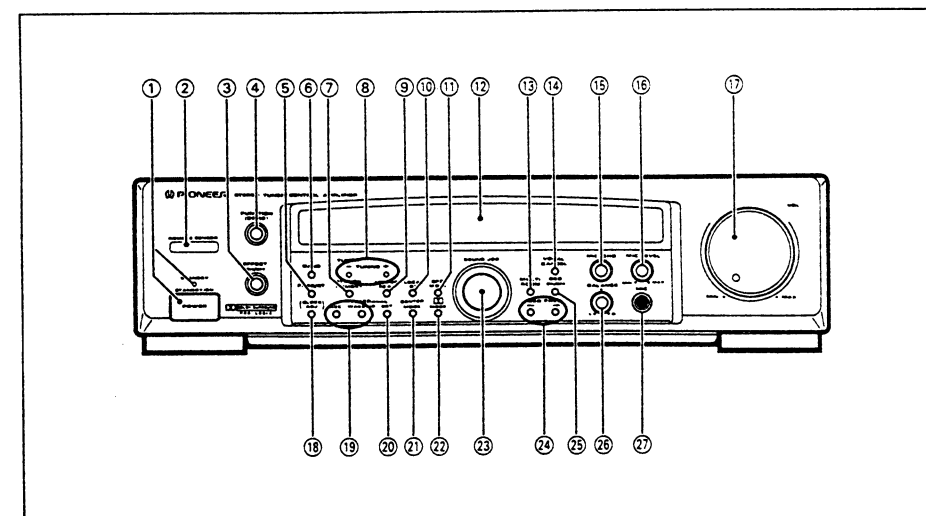
Mark	Symbol & Description	Part No.		Remarks
		AWZ4746	AWZ4454	
	Q1172, Q1173, Q1175	XDA143ES	.....	
	Q1174	XDC124ES	.....	
	D1177	1SS252	.....	
	C1172	CEASR47M50	.....	
	R1173	RD1/8PM103J	.....	
	R1174	RD1/8PM473J	.....	

KEY ASSEMBLY

AWZ4457 and AWZ4456 have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4456	AWZ4457	
	Q1181	XDC143ES	.....	
	D1181	AEL1128	.....	
	R1181	RD1/8PM221J	.....	

9. FRONT PANEL FACILITIES

TUNER CONTROL AMPLIFIER CX-J310/
CX-J410/CX-J510/CX-J710/CX-J910

① POWER STANDBY/ON switch /STANDBY indicator

This is the switch for electric power.

ON When set to the ON position, power is supplied and the unit becomes operational.

STANDBY When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

When only the time is indicated in the display section, the unit is in STANDBY.

② REMOTE SENSOR

③ EFFECT ON/OFF button

Press this button ON, and select the desired sound field with the SFC MODE button. Press the button OFF, and sound from the source is reproduced without any effects.

When using the DOLBY PRO LOGIC SURROUND function, press the EFFECT button ON, and then select the mode with the  MODE button. (CX-J510, CX-J710 and CX-J910 only)

④ FUNCTION (DEMO) button

Each time you press the FUNCTION button, the amplifier function changes.

If this is pressed from power off, it goes into demonstration mode.

⑤ FREQ/ST (Frequency/Station) button

Use to switch between the Frequency mode and the Station Call mode.

⑥ BAND selector button

Each time the button is pressed, FM or AM reception is selected in order.

⑦ STATION MEMORY button

Used to memorize stations.

⑧ TUNING (+, -) buttons

[During tuning]

• When in the Frequency mode, use to raise and lower the reception frequency.

• When in the Station mode, use to raise and lower the station number. [During time and timer setting]

Used for adjusting the clock, timer settings and its related adjustments.

⑨ MEMORY SCAN button

Press this button to scan programs on the preset stations automatically for 5 seconds each. If you wish to continue listening to the station currently being scanned, press this button again to lock the tuning to the station. This will cancel the preset scan function and return you to normal reception.

⑪ LOCAL/DX button (when receiving FM broadcasts)

Use this if the broadcast signal is too strong, causing noise and distortion. The attenuator reduces the strength of the signal, reducing noise and distortion.

⑫ SFC MODE button

Use to recall SFC mode.

CX-J310/CX-J410/CX-J710:

DISCO, HALL, THEATER, STADIUM

CX-J510/CX-J910:

DISCO, HALL, DYNAMIC THEATER, STADIUM, ARENA

⑬ Display section**⑭ MULTI ROOM indicator (CX-J410 and CX-J510 European and U.K. models only)**

Flashes when signal is received from MR-100 Multi-Room System Remote Control Sensor Unit.

⑮ VOCAL CANCEL button/indicator

(CX-J510, CX-J710 and CX-J910 only)

When set to ON, the sound volume of vocal sounds is lowered.

⑯ MIC ECHO control (CX-J910 only)

Use to adjust the mic echo effect level during mic mixing.

⑰ MIC LEVEL control

Used for adjusting the volume of microphone.

⑱ VOL (VOLUME) control**⑲ CLOCK ADJ button**

Used for starting the clock adjustment.

⑳ Timer selector buttons

[WAKE-UP 1, 2]

Used for timer playback setting.

[REC]

Used for timer recording setting.

㉑ SET button

Used for current time, timer playback, and timer recording setting.

㉒ CENTER MODE button (CX-J510, CX-J710, and CX-J910 only)

Use to select the center mode when using DOLBY PRO LOGIC SURROUND. Press the button to switch between NORMAL and PHANTOM modes.

㉓ DOLBY MODE button (CX-J510, CX-J710, and CX-J910 only)

Use to select DOLBY PRO LOGIC SURROUND and DOLBY 3CH LOGIC.

㉔ SOUND JOG

Use to increase and decrease the sound field effect, and the graphic equalizer effect.

㉕ GEO (Graphic equalizer) FREQ buttons (← →)

Use to select frequencies to be boosted or attenuated with the graphic equalizer.

㉖ GEO ON/OFF button

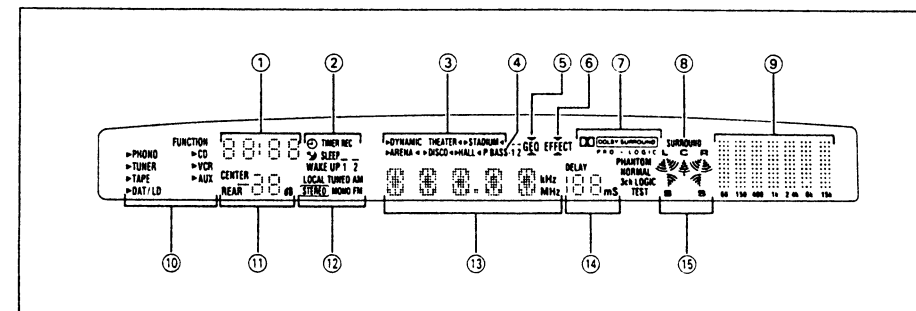
Use to switch the graphic equalizer ON or OFF.

㉗ BALANCE control (CX-J510, CX-J710 and CX-J910 only)

Use to adjust front left and right speaker balance.

㉘ MIC (microphone) jack

This is a standard jack for connecting a microphone.

**Display Section**

* Illustration shows model CX-J510.

① Time/channel indicators

Display current time and channel number.

② Time indicators

TIME REC: Lights during recording timer setting.

SLEEP: Lights when the sleep timer is ON.

WAKE UP 1, 2: Lights to indicate the selected timer during wake up timer setting.

③ Sound Field Control indicators

► ◄ lights for selected SFC mode.

④ P. BASS indicator (CX-J710 and CX-J910 only)**⑤ Graphic equalizer indicator**

▲ lights when the graphic equalizer is ON.

⑥ Effect indicator

▲ lights when the SFC effect is ON.

⑦ DOLBY SURROUND indicator (CX-J510, CX-J710, and CX-J910 only)

DOLBY SURROUND: Lights when DOLBY PRO LOGIC SURROUND is ON.

PHANTOM/NORMAL: Displays selected center mode.

3ch LOGIC: Lights when DOLBY 3CH LOGIC is ON.

TEST: Lights when a test tone is being output for level adjustment of each channel.

⑧ Surround indicator

Lights when Surround is ON.

⑨ Spectrum analyzer display

Regular spectrum analyzer display. When using the graphic equalizer, graphic equalizer settings are displayed.

⑩ Function indicators

► lights to indicate the selected function.

Available functions with the CX-J710 and CX-J910 are PHONO, TUNER, TAPE, DAT, CD/LD, VCR, and AUX.

⑪ Center level, Rear level indicators (CX-J510, CX-J710, and CX-J910 only)**⑫ Tuner function indicator**

LOCAL: Lights when the LOCAL function is ON.

STEREO: Lights during FM stereo broadcast reception.

MONO: Lights when the remote control FM MONO button is ON during stereo FM broadcast reception.

FM/AM: Indicates band being received.

⑬ Alphanumeric display

Displays frequency of station being received, and major operation conditions.

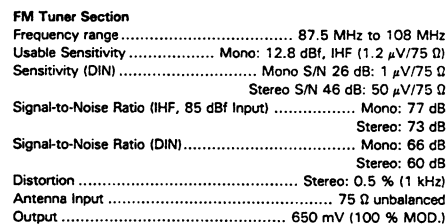
⑭ SFC level/Delay time display

Displays SFC level and DOLBY PRO LOGIC SURROUND delay time.

⑮ Speaker indicators

11. SPECIFICATIONS

TUNER CONTROL AMPLIFIER
CX-J310/CX-J410/CX-J510/CX-J710/CX-J910



MW (AM) Tuner Section	
Frequency range	
9 kHz step	531 kHz to 1,602 kHz
10 kHz step	530 kHz to 1,700 kHz
Sensitivity (IHF, Loop antenna)	350 μ V/m
Output	150 mV (30 % MOD.)

Power Supply/Miscellaneous

Power requirements

U.K. model a.c. 240 Volts~, 50/60 Hz

European model a.c. 220 - 230 Volts~, 50/60 Hz

Multivoltage model AC 110 - 127 V/220 - 240 V
(switchable). 50/60 Hz

Power consumption 15 W

AC outlets

CX-J310/CX-J410/CX-J510/CX-J710

Switched (x 1)..... 400 W MAX

CX-J910

Switched (x 2) Total 500 W MAX

Dimensions 360 (W) x 347 (D) x 81 (H) mm

Weight

Weight	
CY-1310/CY-1410	2.9 kg

CX-J310/CX-J410.....	3.9 kg
CX-J510/CX-J710/CX-J910.....	4.2 kg

CX-J510/CX-J710/CX-J910..... 4.0 kg

- ① Turntable PL-J210
- ② Audio equipment (such as a second CD player)
- ③ VCR (sound only)
- ④ DAT
- ⑤ LD player (sound only)
- ⑥ Tuner control amplifier

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